

MACLEANS AWARDED S.A.R.E. GRANT FOR HFG PROJECT

Dear Friend of High Falls Gardens,

We're very happy to report that our efforts to grow Chinese medicinal herbs have received some welcome recognition. We've been awarded a grant for our proposal to evaluate the potential of Chinese herbs as specialty crops for farmers in the Northeast.

Robert Newman, the collector described in the previous issue (see Winter 1996, Extraordinary Collector) has agreed to furnish us with many rare species to be planted at the farm in Ancram. Thanks to Robert's foresight and largesse, right at this moment hundreds of little shoots, some perhaps never seen before in Columbia County, are poking up inside the greenhouse at the farm.

It's been an exciting winter, and we anticipate even more suspense and thrills in the seasons to come. We promise to keep you posted on what comes up!

-- Laura and Jean



(L to R) Max, Don MacLean, Marnie MacLean, Jean Giblette, Laura Smith

On the first of March, Don and Marnie MacLean of the Thompson-Finch Farm, Ancram, New York, learned that they had been awarded a Grower Grant from the Sustainable Agriculture Research and Education (SARE) Program for the High Falls Gardens project.

SARE, which is funded by the U.S. Department of Agriculture and authorized by the 1985 Farm Bill, has a regional leadership and decision-making structure. The Northeast Region is administered from offices within the University of Vermont. The purpose of the program is to increase knowledge of and help farmers adopt sustainable practices that are profitable, environmentally sound and beneficial to society. In addition, the SARE Farmer-Grower Grant Program emphasizes goals such as reducing costs and increasing net farm income, and increasing self-employment opportunities and jobs in rural areas.

The Grower Grant proposals are evaluated by a committee of peers -- in this case, Northeast farmer/growers. The MacLeans were assured that the proposal for the High Falls Gardens project was at the top of the priority list out of a field of one hundred, indicating a high degree of interest in the possibilities of Chinese medicinal herbs as specialty crops for Northeast farmers.

The proposal requested funds to enable expansion of the number of varieties and acreage planted during 1996 with the participation of a specialized plant collector, Robert Newman, based at the American College of Traditional Chinese Medicine in San Francisco, who is supplying seeds and consultation to the project.

In addition, Jeffrey C. Yuen, a nationally recognized herbalist affiliated with the International Tai Chi Institute of New York City and teacher of many acupuncturists and herbalists including Laura and Jean, is also consulting to the project.

The \$3,498 award was given for the 1996 growing season and covers a portion of the extra expenses incurred by the project participants, including the MacLeans, Giblette, Smith, Newman and Yuen, in their efforts to germinate, plant and evaluate a number of new species in addition to those already grown at the farm.

Because most of the plants are perennials that require several years to reach harvest stage, the project's 1996 results are expected to be preliminary indications of which herbs present possibilities for further study. ■

THE HFG APPROACH TO CANCER PREVENTION

The overreliance of conventional medicine on invasive therapies--surgery, chemotherapy and radiation--for treatment and even prevention of cancer has reached the level of hysteria.

Today, breast cancer is the second leading cause of death for American women. (Heart disease is the first.) The *New York Times* reported on March 27th that, of women in a 1992 sample whose mammograms revealed tiny milk duct tumors, almost half chose to have a breast removed even though there was no way to be sure the tumors were dangerous. The increased use of mammograms in the U.S. had made detection of these tumors easier, yet only slightly more than half the women chose a less-invasive form of treatment, usually lumpectomy.

Regular readers of the news from High Falls Gardens will be able to guess our opinion of such an extreme reaction. The fact is, we KNOW that inappropriate lifestyle choices, including but not limited to dietary behavior, cause cancer. The scientific orthodoxy continues to insist that this assertion is not proven. But there are many ways of knowing, and only certain aspects of human knowledge are conducive to scientific proofs. Knowledge that affects our health today and tomorrow cannot wait for scientific proofs, and is usually referred to as "wisdom."

Lifestyle as the Culprit and the Cure

Ample evidence from cross-cultural comparisons shows that people who are physically active and eat plenty of clean, whole foods, especially vegetables and fruits, are relatively cancer-free compared to those less wise. Even within the United States, the Utah Mormons, who have religious prohibitions against coffee, alcohol, smoking and caffeine, have far lower rates of cancer than the rest of the country even though they are of similar genetic stock. We have more than enough evidence to indict the SAD (Standard American Diet) in its role in cancer, even though we can't prove it in the courts of scientific orthodoxy.

Lifestyle is important! Diet, exercise and emotional states including the response to stress play a major role in the development of cancer or other degenerative diseases. One is sometimes tempted to take an attitude of resignation, such as: "I know someone in virtually every sphere of life who has been afflicted with cancer. There is nothing I can do about it anyway, so why should I try?" But something CAN be done, and if we adopt the strategy that the best offense is a good defense, even marginal improvements in lifestyle will help bolster the immune system and increase the body's ability to ward off cancer.

Reducing stress in everyday life may seem impossible, but every little bit helps. Activities as simple as a daily walk, a yoga class once a week, taking three minutes a day to

close the eyes and breathe deeply, or indulging in a leisurely bath instead of a rushed shower can make a difference. Of course, the bigger things in love and work--maintaining healing relationships, living for a purpose outside oneself, or working toward meaningful goals--make enormous improvements in stress levels, the quality of life and the state of one's immune system.

Our Collective Lifestyle: Environmental Degradation

Unfortunately, there's a "catch" to a preventive strategy. Because of our collective lifestyle, especially since WWII, manufactured chemicals have permeated our environment and are, to a large extent, unavoidable. Food quality has been seriously damaged by loss of soil fertility in addition to contamination by pesticides and hormones.

Environmental factors play a large part in undermining our general health including, especially, the immune system. Industrial byproducts such as dioxins and PCBs present in our air, soil and water mimic partial aspects of estrogen. Hormone-disrupting chemicals may have devastating long-term effects through cumulative exposure to insignificant quantities, or by combined reactions. The increase of

Knowledge that affects our health today and tomorrow cannot wait for scientific proofs, and is usually referred to as "wisdom."

ultraviolet light at the Earth's surface due to alteration of the atmosphere by CFCs and other compounds is implicated in the rise in skin cancers and may also compromise the immune system.

The rise of industrial practices in agriculture has led to a decrease in the fertility of the soil so that, in addition to actual contamination with pesticides, conventionally-grown grains, fruits and vegetables lack nutrients. Eggs, meats, dairy and other animal products are similarly unhealthy because of the poor quality of feeds, injection of growth hormones and antibiotics, confinement and other destructive practices.

Defensive Tactics

One way to live for a higher purpose is to take personal and collective political action to rid the planet of some of the one hundred thousand synthetic chemicals now on the market worldwide, including the five billion pounds of pesticide used each year. However, we can adopt measures to avoid and lessen the effects of these toxins on our bodies. An anti-cancer strategy to cope with these unavoidable facts of life is to bolster the immune

response, specifically to keep the body's primary and secondary lines of defense functioning optimally.

Classical Chinese medical theory describes cancer as a form of water stagnation or dampness trapping heat. Stagnation in all forms must be resolved, including repressed emotions and resentments. Unrelenting stress is detrimental to the function of key internal organ systems. A healthy liver system prevents congestion, accumulations and deposits in the body. Good digestion is the origin of proper immune response functioning according to classical Earth School thought; thus, the spleen and stomach system may be considered the first line of defense.

Environmental detoxification along with immune system stimulation can be achieved by massage, saunas and sweats, salt baths, enemas and colonics, etc. Diet, including the use of herbs, plays a central role in the process.

Another "catch," however, is that use of detoxification and dietary tactics to TREAT cancer is much more problematic than using them to prevent cancer. Once a person's liver has been weakened with radiation and chemotherapy, the power of such therapies to affect the course of illness is drastically reduced. This means a cancer patient usually has to be lucky enough to detect it early and gutsy enough to decide on the alternative route immediately to optimize his or her chances.

A Positive Defensive Strategy

Revitalization of the whole mind-body system is preventive of all forms of cancer as well as other degenerative diseases. This can be accomplished through lifestyle changes, including revision of dietary and exercise habits.

Good dietary habits are not just a matter of choosing which types of food to eat, but also of knowing the source of the food--how and where it's grown--and of eating locally and organically in order to support the health of the soils in your bioregion and to stay in tune with your place and time.

Rather than belabor the obvious (*Exercise! Stop smoking! No more alcohol and coffee!*), we offer several positive defensive tactics against cancer recommended by preventive health advocates, including our teacher, Jeffrey C. Yuen.

- Cook with organic, cold-pressed olive or sesame oil rather than animal or other saturated fats.
- Eat fish high in omega fish oils (salmon, mackerel, herring, tuna, cod and others).
- Use low-fat, organic, local dairy products, especially yogurt which is highly digestible. Use soy milk instead of cow's milk.

- Eat more beans, including tofu and other soybean products. Fiber in whole foods improves elimination. Beans can be cooked with carminative herbs and spices, such as turmeric, fennel and caraway seed, to improve digestibility and enhance cancer prevention.
- Flaxseed is considered to be the best source of lignans, protective fibers. Grind a teaspoon or two of flaxseed, to improve assimilation, right before sprinkling it on salad, cereal or yogurt or mixing with water to drink.
- Organic cruciferous vegetables--including kale, cabbage, cauliflower, broccoli--regulate estrogen levels and have several other anticarcinogenic properties.
- Eliminate refined sugars and cut back on all sugars, including fruit juice and excessive fruit consumption.
- Eat seasonal fruits of the Wood type (which support the liver)--berries in summer, grapes and pomegranates in fall, pears and apples in winter. A local, low-spray or IPM (Integrated Pest Management) producer may have more to offer than a distant organic producer.
- Sea vegetables help prevent and treat cancers. The best supplements are considered to be chlorella, algae, and spirulina. Kelp, alaria, dulse and other seaweeds are harvested organically in Maine and elsewhere and are readily available in dried form. Add small pieces to soups or sprinkle on salads.
- Wild vegetables are excellent sources of defensive nutrients. Harvest dandelion greens, nettle and purslane, among others, from a trusted location. Follow seasonal principles in cooking--eat steamed more than raw in winter, more raw in summer.
- Green tea, the least processed form of tea, contains anticarcinogenic substances, lowers cholesterol, and can serve as a tasty base for infusing other herbs.

What About Herbs?

Mention Chinese herbs and most people immediately think of the famous tonic herbs such as Ginseng or Gingko. We at HFG are skeptical toward the overuse of tonic herbs. The chronic degenerative conditions such as cancer that plague Americans are brought about by conditions of excess rather than deficiency. In other words, we suffer from overnourishment by poor food--stale, refined, high in calories and low in nutrients--and the usual sedentary lifestyle which fails to burn these calories. Therefore, cleansing herbs, salty (mineral-rich) herbs that soften deposits and tumors, and bitter herbs that stimulate digestion and assimilation may be more appropriate. Herbs are an enhancement of diet, used for balance and diversity, and are ineffective over the long term without the basics of an active lifestyle, good food in moderation, and a means of coping with stress. ■

© 1996 Laura Smith and Jean Giblette. References cited upon request.

Johnny Appleseed on the Internet

In HFG's quest for rare plants, one of our most delightful discoveries has been a fellow plant lover, Duncan McDougall, who has founded a unique organization of interest to gardeners and others concerned about preservation of biodiversity.

The Seed Guild applies a share membership concept to distribution of small quantities of rare seed from around the world. Duncan runs The Guild from the village of Lanark in Scotland while maintaining his network of contacts via the Internet. He describes this project in his own words, as follows:

How often have you walked through a garden and admired its beauty? As a gardener, did you envy the owner who possessed these unusual plants and wish you could obtain coveted seed to create your own Eden? I love growing plants. There is always something exciting about the waiting and watching expectantly to see what will develop. Yet how frustrating it is to find that the seeds are unobtainable.

I tried to overcome this by subscribing to seed collecting expeditions to Asia and New Zealand, and took great pleasure in growing plants from the seed I received. A good seed collecting expedition is dependent on competent staff and favourable weather when the staff are on location. However, after an unsuccessful expedition plagued by unseasonable rain and snow, I began to see that it was not necessary to gamble on weather conditions on the other side of the world to obtain unusual seeds. Many of the species collected on previous expeditions are now growing in botanic gardens where the seed can be collected when conditions are favourable. Botanic gardens do not generally market their seed, but would they sell to me?

I initially contacted 160 botanic gardens and received replies from ... four! Fortunately, all four were in favour of making their seeds available for sale to amateur gardeners. The response, or lack of it, from the botanic gardens was disappointing, but the problem seemed to be that the seed was usually in very short supply -- in certain cases, as few as five or six packets. How do you market five packets of seed when 500 people want a packet? The answer is, you don't! Five happy customers don't balance 495 unhappy ones, which is why the major seed companies carry only those species for which they can guarantee large amounts of seed each year.

To get around this problem, I researched several marketing options. The most suitable one appeared to be a share scheme, similar to that used in the seed collecting expeditions. As a result, The Seed Guild is believed to be a unique trading concept which combines the resources of botanic gardens all over the world and makes unusual seeds available to the amateur gardener.

We developed three share levels for membership in The Guild and each was set at a minimum number of 15 packets per share. The Bronze level is the least expensive share [Ed. Note: Shares range from \$10-20 per year]; the 15 packets are chosen at random and can include anything from conifers to cacti. The Bronze is the fun share -- cheap, cheerful and totally unpredictable. The Silver share is a bit more expensive and more suited to the gardener with general interests, but gives the member a degree of choice from categories such as herbaceous perennials, alpines, bulbs, grasses, trees and shrubs. The Gold share is for the connoisseur, and here the choice comes down to single species such as Primula or Meconopsis. When possible at least fifty percent of the allocation will be of the chosen species; for example, the member would receive eight packets of different Primula and the balance of the share would be made up of alpines.

The Guild has also developed a growing presence on the Internet, at <http://www.gardenweb.com/seedgd>, where there is an online catalogue of the material that became available after The Seed Guild list was published. The Seed Guild has begun to attract commercial interest, and three of the largest mail order nurseries in the USA now buy some seed from The Guild.

The botanic gardens have also started to realise the importance of the income they receive from The Seed Guild, and the number of participating gardens has now increased to eighteen in twelve different countries including China and South Africa.

At the last count, The Guild has had at times nearly 6000 different species in stock. Details of the seeds sent out to members are retained on a database to ensure each one always receives different seeds each year. Due to the number of species available, a Bronze shareholder should not start receiving duplicate seeds until they have been members for 400 years -- complaints can be made at that time! The spread of The Guild's customers is as wide as its suppliers and there are members in Brazil, Canada, USA, most European countries, Taiwan, Japan, Australia and New Zealand.

The Seed Guild has been described as a kind of lottery, but a lottery where everyone is a winner. The only losers are the librarians being driven to distraction by Guild members looking for reference books on obscure plants! It is a scheme run by gardeners for gardeners, with the intention of adding a bit of fun, anticipation and a sense of adventure to your gardening year.

Further information and two free packets of seed can be obtained from The Seed Guild, P.O. Box 8951, Lanark ML11 9JH, United Kingdom. Please enclose three \$1 bills to cover postage. ■