

GRAIN IN THE GARDEN

By Dan Jason

The most thrilling part of my garden this past year was definitely my grain patch—heritage wheats, barleys and oats made a breathtaking display.

In late April, I sowed 66 cultivars of heritage wheats, barleys and oats in beds each about four feet wide and twenty feet long (1.2 m x 6.1 m). For most of the summer, they made a breathtaking display, their long awns of various lengths and hues dancing in the slightest breezes.

The first question that naturally comes to mind for gardeners considering grain growing is why one would think of growing wheat, barley or oats given the millions of acres that big-time agriculture devotes to grains in North America. My answer is that growing even a small patch of grain can give you an intimacy and appreciation for some of our basic foods that will last forever. And, if you're seriously thinking about growing more of your own food, nothing can be easier or more rewarding than grains. They grow like the grass of your lawn—only you allow them to mature instead of mowing them down.

There are many uses for grains awaiting our exploration and delight. I am just starting to realize, despite growing grains for twenty years, that variety selection for those other uses is just as significant as for selecting flour qualities.

Most people in Canada have forgotten or have never known that grains can be cooked as the whole foods they are. If you don't mill them, pearl them or roll them, but just cook them, you get all of their goodness. We're somewhat used to doing this with imported rice but not with our own grains. Flavours and textures vary as much as with rice. Cooking wheat, barley and oats as whole grains provides maximum amounts of their rich

storehouse of fibre, niacin, thiamine, iron, phosphorus and calcium.

Sprouted berries of grain are bursting with energy and can be used in many delectable ways. You grow sprouts by soaking whole grains overnight and rinsing them twice a day for two days. They provide a raw food with a soft yet crunchy texture and a rich sweet taste.

An even more immediate burst of energy can be had by downing a shot of freshly juiced wheat, oat or barley grass. Here again, there are interesting differences between varieties.

Grains grown for food also provide excellent compost and mulch material. After harvesting the seed heads, the straw can be cut down and recycled either in other parts of the garden or on the same bed.

Growing grains

Grains grow well in ordinary garden soil. Some varieties tend to get quite top heavy in rich soil and fall over ('lodge') in wind or rain. This can be quite inefficient for machine combining but is not a big deal for a gardener harvesting by hand. Still, I usually sow my grains in my least fertile ground. The root growth of wheat, barley and oats make them excellent conditioners for both clay and sandy soil.

It is important to realize the difference between hulled and hullless varieties of grains and to grow the hullless ones. Seeds of all cultivars are coated by hulls but some have a thin, easy-to-remove hull and so have been given the 'hullless' designation. Hullless grains are easily cleaned by hand or foot rubbing.



Dan Jason uses his feet to thresh his grain.

Most commercial cultivars of oats and barley have tight hard hulls that need to be threshed by machines. Varieties of spelt, as well as some of the old wheats, also require mechanical processing but most modern varieties of wheat have loose-fitting hulls.

Grains come with the huge bonus of their hardiness. In much of North America, they can be sown in the fall and overwintered. Thus they can be cover crops and food crops simultaneously. They prevent erosion and condition the soil at a time when normally you wouldn't think of growing anything.

Planting: Here on the West Coast of BC, I sometimes sow some wheat, barley and oats in September or October. They make it through very soggy times as well as nights that go down to -15°C (5°F). Reports from customers across Canada indicate they can stand a lot colder weather than we have here. If not fall planted, I recommend planting them as soon as the ground can be worked in the spring. Grains appreciate an extended cool season for growing and don't produce well where summer follows right on the heels of winter. My fall-sown grains outyield my spring-sown ones, even though they are ready to harvest only a couple of weeks earlier.

I think it a good idea for first-time grain gardeners to seed in rows in prepared soil. This makes it easier to know what you've planted when other grasses start appearing. I walk my row seeder the desired length of row, setting the depth to a seed's length below the surface. Alternately, you can plant your grains by hand, sowing them a few finger widths

apart. You needn't worry about thinning. After multiplying your crop for a season and learning what to expect, you might opt for planting in wide rows or blocks the next time around.

Weeding: Weeding isn't as crucial as it is for other garden crops but other grasses should be pulled out to avoid confusion when harvesting. Grains are quite adept at colonizing areas once they get growing. They grow side shoots, called tillers, from the base of the stem.

I find the chewiness of whole grains to be a very positive attribute, providing more flavour and expanding meals to a less hurried affair.

Watering is also less of a consideration than for other crops. Grains are normally grown at times when there is abundant soil moisture. They are then ready for harvesting by the time it gets hot and dry in the summer.

Harvesting: Harvest when the seed heads have totally dried. Your fingernail won't be able to dent a ripe grain kernel. With an April sowing, my barley is usually ready by late June or early July, and my oat and wheat crops a few weeks later. My preferred methods of harvesting are either to snip the seed heads with scissors or to snap them with thumb and forefinger into a bucket.

Threshing: All manner of small-scale threshing equipment has been invented in countries where small-scale grain growing is com-

mon. But until an inexpensive, efficient thresher appears on North American markets, I'm content to use my feet.

I've made a wooden box about 2 feet by 3 feet by 1 foot high, and screwed thin wooden slats to the bottom of this for extra abrasion. I get into my threshing box with the harvested grain and remove the hulls by the simple process of rubbing the grains against the bottom of the box with my shoes. This same shuffle performed on a tarp on flat ground would serve almost as well. I then blow the chaff away with the blow nozzle attachment on my air compressor. A hair dryer, fan or the wind work also, as do screens. Any leftover chaff will also rise to the water surface before cooking grain.

A 50-foot (5-m) row can easily yield ten pounds (4.5 kg) of grain and wide row plantings can yield much more. Grains multiply themselves very rapidly. A small packet can end up being enough to sow an acre after two years.

Cooking with grains

Whole grains take about one hour's simmering to be cooked. Soaking speeds the process somewhat and renders the seeds more digestible. Even with longer cooking, their texture will seem quite chewy to people used to soft rice, pearled barley or rolled oats. A bowl of cooked wheat berries does not get eaten very quickly. Cooked whole grains may take some getting used to for those accustomed to soft foods. I find their chewiness a very positive attribute, providing more flavour and expanding meals to a less hurried affair.

Saving your own seed

Grain cultivars don't cross, so saving seed for planting is simply a matter of not eating all the harvest. No genetically modified wheats, barleys or oats are yet in the marketplace.

I think small-scale grain growing is going to catch on as gardeners realize how easy it is to grow such high quality food. Harvesting and threshing the seed are somewhat labour intensive but the rest takes almost no time at all.

As people discover and begin to desire the wonderful array of colours, tastes and textures in grains, large-scale farmers will be encouraged to diversify their crops. They will be able to ask more for whole grains than the few pennies a pound they now receive for processing grains. In a world of rapidly increasing costs for processing and transporting food, it's high time we began to appreciate not only the food quality whole grains provide but the energy savings as well.

Further information:

Living Lightly on the Land: Self-reliance in Food & Medicine.

Dan Jason, Self-published, 1998.

Small-scale grain raising. Gene Logsdon, Rodale Press, 1977.

Dan Jason is President of the Seed and Plant Sanctuary for Canada, www.seedsanctuary.com, and the owner of Salt Spring Seeds, www.saltspringseeds.com. He is the author of eight books on organic growing and whole foods cooking. His newest book is Saving Seeds As If Our Lives Depended On It.

Photo credit: Copyright 2006: Marion & Jeff Markus.

LETTERS TO THE EDITOR

More Gleanings

Many COG members will remember Ann Cleary's writing. Over the last twenty-five years, Ann has written many articles and columns for *The Canadian Organic Grower* and its past incarnations as *COGnition* and *EcoFarm & Garden*. In her Gleanings column, Ann provided readers with information (and her analysis of it) gleaned from the various books or articles she had come across in her extensive reading.

Ann is now 93 and living in a home in Almonte, Ontario, but she is still keeping up to date with the issues. Now, her concerns are with food security. I visited her recently and, because she can no longer speak directly to TCOG readers through Gleanings, she asked to me to do so instead.

Ann had come across a reprint of a leaflet put out by the UK Ministry of Agriculture entitled "Grow for Winter as well as Summer," the first in the *Dig for Victory* series, date circa 1940. It includes a table of plantings and period of use for each crop, as well as a garden and rotation plan which produces a family's year-round supply of vegetables from an area 90 ft. x 30 ft. (27 m x 9 m) if you "dig well and crop wisely." Readers can find the leaflet online at www.earthlypursuits.com (go to *Dig for Victory* under the book listings). The complete series is available on the site [the September issue provides excellent information on storing onions and potatoes].

Granted, the garden plan is more suited to Canada's West Coast climate than that of central Canada, but Eliot Coleman has

shown us that winter harvests are possible even in a cold climate. What Ann was focusing on was not so much the contents of the leaflet but the fact that it was a Ministry of Agriculture publication that encouraged everyone to grow their own vegetables. She believes it is time to encourage more people to have gardens and allotments in order to become less dependent on food from afar and to reduce the greenhouse gas emissions produced by food transport. And she thinks the Ministries of Agriculture should be helping to do this. It's no good waiting until the oil runs out.

—Anne Macey
Saltspring Island, BC

Demand for local food

Like many other people who buy organic, I'm concerned about how much of our food comes from far away. I realize we don't grow oranges in Canada but onions? Potatoes? Apples? This past summer I was disappointed to see only about a quarter of the produce available was from Ontario (I live in Toronto), when it could easily have been three-quarters.

I contacted the local health food store, an excellent store with a great variety of wholesome food, but unfortunately, a lot of it is grown thousands of kilometres away, coming in by pollution-creating trucks and planes. Meanwhile, local organic farmers are not getting the support they need.

The floor manager of the health food store responded to my concern with a letter stating:

"We completely agree with you on this matter, but unfortunately have had some challenges in keep-