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DEAR ORGANIC GARDENERS,

http://www.seedsofchange.com/enewsletter/issue_70/dear_gardeners.asp

This is my eighth spring editing the Cutting Edge eNewsletter from my farm in Maine and this issue will be my last. With 53 editions behind me, I'm delighted to be handing the reigns over to Lindsay Dozoretz, who many will know from her thoughtful writing here in the last two years or her current moderation of the Seeds of Change Gardening Forum.

It has been more than an honor to edit this publication and work with the dozens of writers who toiled long and hard to share their knowledge and experience so that we could become better gardeners. Recent years have seen a resurgence in organic gardening and I'd like to think that all of our hard work has played a small role in making that happen, and that the movement will continue to burgeon, thanks to people like yourselves, who are leading by example and working in your communities.

As I move on to new projects, I remain committed to what we've worked for. Backyard gardening and locally-based, sustainable farming are a big part of the answer to so many of the problems we face as individuals, as communities, and as a planet. A secure supply of genetically diverse and adaptable seeds and the knowledge of how to grow them and complete their cycle by saving seeds is a priceless gift that we can leave for the generations to come as they cope with the ecological challenges ahead.

As a father of a young son, I think about those challenges every day. What will my son's world look like? Often I hesitate to ponder the question too deeply, but I find some comfort in the fact that, although he is not yet three years old, he joins me in marveling at the miracle of a seed emerging from the soil, delights in harvesting fresh greens from the greenhouse, already discerns the weeds from the crop, and pretty much daily, checks on "my worms" in our kitchen vermicomposter. The recent surge toward edible schoolyards and community-based food and farming are also beacons of hope in the face of often bleak news.

I also find great hope in what is going on at Seeds of Change these days. As you will read below, more committed and experienced people are joining the team to meet the growing demand for seeds, plants, gardening tools, and knowledge. New and exciting food plants are finding their way into our diet. New techniques are being explored. The seed quality is better than ever. And, most importantly, thousands of new gardeners are experiencing the myriad joys of growing organically. Thanks for being part of it and have a great season.

OCA – FOOD OF THE FUTURE **BY STEVE PETERS**

http://www.seedsofchange.com/enewsletter/issue_70/oca.asp

Oxalis tuberosa Oxalidaceae (Wood Sorrel) Family

In its native Ecuador, Peru, and Bolivia, Oca is the second most widely consumed root crop behind the potato, but this bright and colorful fingerling-shaped tuber is almost unknown to most North Americans even though it holds the potential to be a significant food crop throughout the world. Oca is easy to propagate, tolerates a wide range of soil and climatic conditions, and is delicious and nutritious. In New Zealand it has been grown since the 1860's and is known widely as the New Zealand yam. In Mexico, where it has been propagated for nearly two centuries, the tubers are eaten raw and spiced with salt, lemon, and hot pepper.

Diverse and nutritious

There are probably hundreds of distinct varieties of Oca, displaying a multitude of hues ranging from yellow, orange, red, pink, and white, although only a few are available outside its native region. The roots are crisp and moist with a pleasant sour flavor when eaten raw, because of a fairly high concentration of oxalic acid. Tubers exposed to sunlight for several days have increased glucose content and become sweeter. Steaming lightly brings out a distinctive tart taste balanced with raw nutty overtones. Oca tubers can also be baked, fried, or boiled. Traditionally the tubers are often dried, extending storage life and making a convenient, healthful snack food.

With a similar nutritional value to potatoes, Oca is recognized as a staple survival food. The tubers contain 70-80% moisture, 11-22% carbohydrates, 1% each of fiber, fat, and ash, and a significant amount of calcium and iron. The green tops of the bushy, compact, 1-2 foot high plants have clover-shaped leaves that are also edible. Their tangy, tart flavor makes them a great addition to salads.

Easy to grow, but needs long fall days for tuber production

Oca prefers full sun in a nutrient-rich, sandy loam soil, although it will tolerate low fertility and a wide pH range from 5.3 to 7.8. It grows best under moderately cool conditions and will survive very mild frosts. When temperatures exceed 80° F, however, the plants begin to show signs of heat stress such as wilted leaves. Therefore in warmer climates it is best to grow plants under partial shade.

The greatest limitation for widespread use of Oca is its inability to produce full-sized tubers without certain climatic and day-length requirements. Most varieties do not begin to form tubers until the day-length has shortened to 12 hours (around mid-September in North America). Two to three additional frost-free months are needed for full tuber development. In most of California Oca will survive as a perennial, since winter temperatures rarely go below freezing. The milder regions of the Pacific Northwest also are optimal. Oca is typically grown there as an annual, and can sometimes even survive under winter soils to re-sprout again in the spring. In the central and northeastern U.S, however, nearly frost-free protection is required during the fall, because hard frosts will kill plants long before good-sized tubers are formed. Furthermore, Oca is not even recommended for the hot, humid regions of the southeastern U.S. because the tubers become susceptible to rotting under these conditions. Future adoption of Oca in many temperate regions of the world will require day-neutral or long-day

adapted varieties to overcome the day-length problem.

If you can grow a potato...

Oca is propagated much like potatoes. Plant each seed tuber about 12 inches apart and 2 to 3 inches deep in the early to mid-spring after the possibility of hard frosts has passed. For an earlier start in more frost-prone regions, start indoors and transplant out after the average last frost. Oca can also be grown to maturity in 5-gallon containers. Adequate moisture after mid-September (the time of tuber initiation) increases tuber size significantly, and a later harvest will ensure larger tubers. Mounding soil around each plant will also help produce higher yields. Plants will tolerate light frosts, but if temperatures drop below 28° F for more than a few hours the leaves will die back completely. This is the time to harvest your crop. Average yields per plant are approximately 2–3 pounds under good conditions. If tubers are harvested carefully to avoid bruising or cutting, they will store for several months in a cool (35–45° F), dark place. Seeds of Change offers a few distinct varieties which will each have slightly different flavor and texture. Some varieties will form tubers earlier than mid-September, and some will be more productive. Keep track of which varieties do best for you and try saving some of these tubers for subsequent plantings.

We are pleased to offer this exciting new crop for 2009 and realize that there is still much to be learned about its cultivation and adaptability. Please share your experiences with us so we can share the information with other growers.

Steve Peters
Seeds of Change Product Development Manager

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THE GOOD LIFE GARDEN AT UC DAVIS BY TERRY ALLAN

http://www.seedsofchange.com/enewsletter/issue_70/mondavi-garden.asp

An exciting new edible landscape and educational garden is growing at UC Davis. Situated at the heart of the newly opened Robert Mondavi Institute (RMI) for Wine and Food Science, the “Good Life Garden” features Seeds of Change vegetable, herb and flower varieties suitable for each of the region’s three growing seasons, all under organic management.

The mission of the Good Life Garden is to expose and educate a wide audience to the relationship between good food and good health. Toward that end, the garden includes detailed maps and interpretive displays explaining the nutritional attributes and horticultural requirements of the varieties currently planted. Concepts like companion planting, crop rotations and cover crops are demonstrated in the layout of the ever changing garden, and highlighted with strategically placed signs and graphics. Special events, tasting and sensory panels, and public workshops featuring the produce from the garden are hosted throughout the year. And everything is supported with an excellent website.

The beauty of the garden is more than enough to attract the attention of the over 1 million visitors who pass through the RMI courtyard each year. During the grand opening ceremony last fall several comments were overheard including: “This is the most interesting landscape on campus” and “I love the way they combined these vegetables with the flowers! Let’s try that at our house.” It was only after reading the signs that the last commenter realized that the flowers were intentionally placed to attract the beneficial insects that control aphids on the vegetable crop. The garden is obviously having its intended impact.

The success of the garden reflects the thoughtful design and inspired management of the project on the part of

the UC Davis Facilities Maintenance team. Landscape Architect Christina DeMartini Reyes admits that designing with vegetable plants was a new concept. “But now that I am becoming more familiar with the vegetable species, it has opened up a whole new world of landscaping possibilities. The vegetable species offer a wide range of ornamental features – colors, textures, scents and even flowers – that it comes as somewhat of surprise to realize that you’re looking at a productive food garden.”

Sal Genito, Director of Buildings and Grounds, is especially excited by the ever changing nature of the plantings and believes it will draw a growing amount of interest. “The garden is a tremendous tangible expression of the more academic work being carried out in the Institute’s laboratories and classrooms. We can focus on different educational themes each season. The central location of the garden really helps tie all of the work together.”

A full time organic gardener has been hired to care for the Good Life Garden, as well as the more typical institutional landscape plantings surrounding the new complex. “If we can be successful using more sustainable management practices in this part of the campus landscape, we can extend those techniques to the campus as a whole,” says Cary Avery, the Superintendent of Buildings and Grounds.

Seeds of Change is excited to partner with UC Davis on this edible landscaping project, and has been providing technical assistance and advice, as well as seeds for the garden. It has proven to be an excellent showcase for our 100% organic varieties and demonstrates the viability, flexibility, and simple beauty of organic gardening.

To learn about the Good Life Garden and related events please visit www.goodlifegarden.ucdavis.edu.

Terry Allan
Seeds of Change West Coast Sales Representative

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PRODUCT HIGHLIGHTS

http://www.seedsofchange.com/enewsletter/issue_70/products.asp

Spring is on the way!
These products will help you get a jump on the gardening season.

Deluxe Coldframe
A great way to extend the season and harden off seedlings before transplanting.
http://www.seedsofchange.com/garden_center/product_details.asp?item_no=PS15686

Seed Blanket
Protect early crops from pests and light frosts.
http://www.seedsofchange.com/garden_center/product_details.asp?item_no=S17206&q=+s17206

Large Poly Tunnel
Start spring crops up to 3 week earlier.
http://www.seedsofchange.com/garden_center/product_details.asp?item_no=S14728

Soil Blockers
Discover a a time-tested, eco-friendly, and highly effective way to start your seedlings.
http://www.seedsofchange.com/garden_center/product_details.asp?item_no=PS22089

Valley Oaks Wheel Hoe
A durable and easy-to-use and effective alternative to gas-powered tillage for cultivating between rows.

http://www.seedsofchange.com/garden_center/product_details.asp?item_no=PS22113

Farmer's Hoe

The best tool we've found for heavy cultivating, creating swales, forming raised beds. Especially useful on sloped ground.

http://www.seedsofchange.com/garden_center/product_details.asp?item_no=S16204

Asian Greens Seed Collection

Eight cold-hardy varieties that will have you eating fresh greens in weeks, and spice up your salad bowl throughout the year. Save 23% over individual packs.

http://www.seedsofchange.com/garden_center/product_details.asp?item_no=S17193

Garden Ecology Seed Collection

Start these beneficial plants now to add diversity to your garden ecology. Includes many useful medicinals. Save 24% over individual packs.

http://www.seedsofchange.com/garden_center/product_details.asp?item_no=S16875

Organic Seedlings

No time to start from seed this year? Our Organic Seedlings are an easy and fun way to establish your organic garden in a flash.

http://www.seedsofchange.com/garden_center/browse_category.asp?category_id=11797

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**ORGANIC, HOME-GROWN FOOD ON THE RISE!
THE COST EFFECTIVE AND WISE ALTERNATIVE.
BY MARC COOL**

http://www.seedsofchange.com/newsletter/issue_70/organic-rise.asp

In looking at our seed sales and speaking with garden industry friends and colleagues, it is clear there is a renewed interest in gardening, especially in growing food crops. More people are buying garden seeds, and they are buying more vegetables (as compared to ornamentals) and larger volumes of seed (for instance bulk volumes from our garden catalog). There is clearly a trend towards more gardening, which for years has been on the decline. Since the early 1990's, the numbers of Americans who consider themselves gardeners has declined by about 20%. This decline in numbers was due to lack of time or space to garden, and resulted in (or maybe even resulted from?) a lack of gardening knowledge. Also, the need to garden was not as urgent, as the growth of health food stores, farmers' markets, etc provided the high quality, organic, and often local food that people would otherwise grow themselves. I know for example that my family, from the Midwest, who for generations had very large gardens that provided much of the food on their tables, in the last number of years has stopped gardening and buys similar quality produce from local farmers.

In recent times however, this dynamic seems to be changing. With an increasing cost of food and with all the issues and concerns surrounding the economy, more and more people are turning to gardening. They are looking for ways to reduce the expense of their food bills as well as regain confidence in the safety of their food. And of course one of the best ways to do this is to plant vegetable seeds and grow organic food in your back (or front!) yard. Consider the low cost of seed (our packs are mostly \$3.29/pack, others are higher or lower), compared to the price of vegetables in the store. If you, for instance, plant 50 tomato seeds and harvest 20 pounds of organic tomatoes off of at least 40 plants, this is 800 pounds of tomatoes, which might cost you \$2,500 at the store. The cost of seed (the lowest input cost), plus soil amendments, plant protection, tools, your time etc, is much lower than this. Furthermore, by growing your own garden, you know exactly what went into your food and can have full confidence in safely feeding your family.

With increasing numbers of people living in urban areas with smaller yards, many people are also finding ways to plant gardens in smaller spaces. We are seeing an increased interest in seed varieties that do well in containers, windowsills, roof top gardens, and small kitchen gardens where it is perfectly possible to produce substantial amounts of food. Our website has a special urban gardening section dedicated to such growing conditions. By growing your own food, you can re-connect with nature and take an important step towards a more sustainable lifestyle. In addition, growing your own vegetables is fun, and it allows your kids to understand that not all food comes wrapped in plastic from a store shelf!

Several people have also asked us about the benefit of using organic seeds. Most people seem to be well-versed on the advantages of organic growing and organic food, but less so on the advantages of organic seed. In fact, the same advantages exist in using organic seed, plus one additional important one. Conventional seed production is an inherently chemical-intensive operation. Because the plants must survive for much longer in the field than a food crop, large amounts of chemical fertilizers, herbicides, and pesticides are often used to keep them alive. In organic seed production, alternative techniques reduce the impact of chemicals on the environment as well as on the health of the seed growers and their families. By using organic seed, you can substantially help decrease the overall use of toxic chemicals in the environment. The other significant advantage in using organic seed is that plants have a strong interaction with their growing conditions. If you select and grow a seed variety in organic conditions, especially for several generations as we do, then the seed from this plant will be better adapted to growing under similar organic conditions, so will perform better for you in your farm or garden. It seems clear that the most conscious way to start an organic garden is by using organic seeds!

We wish you Happy Gardening this season, and invite you to join us in working toward a more healthy and organic farming and gardening!

Marc Cool,
Seeds of Change Director

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FARM REPORT: MARCH 2009

BY RICHARD BERNARD

http://www.seedsofchange.com/enewsletter/issue_70/farmreport.asp

What does a farm in the upper Rio Grande Valley in New Mexico do during the cold winter months? Many would think that it gets a well deserved long sleep. It might look like this, especially when a layer of snow (that never stays for long) blankets the valley; but in fact all the fields have been cover-cropped with blends of cereals (triticale, spring oats, winter rye) and legumes (hairy vetch, Austrian winter pea, clover) and by late winter our greenhouse is already hosting our first onion and perennials sowings.

Before the acequia (main ditch) brings us irrigation water from the Rio Grande, we have no choice but to use our well water which is extremely alkaline. It can induce toxic reaction with some young seedlings, especially peppers. To remedy this problem, we have connected the well with our water catchment tanks that collect monsoon rainwater from our barn roof. A 50/50 blend gives us a perfect pH that allows us to safely water our greenhouse. Cleaning the ditches and burning weeds and leaves keeps us busy outside during the calm and bright sunny days of what has been a mild winter. Our average night temperatures have been in the mid twenties with temperatures going up as far as the mid fifties in the middle of the day. The spring winds have even started to blow certain afternoons.

This is also the time when we select from a large pool of qualified applicants to our internship program. We plan to have 4 or 5 interns this year, starting in mid-April and finishing up as the growing season winds down in mid-October. The interns will focus on projects around soil improvement, variety trials, seed selection and

food distribution. We are also in the process of implementing a permaculture-based landscape design around our farmhouse and we are hoping that at least one of our interns will be interested to participate in this project.

So, everything looks calm in appearance here under the old cottonwoods, but things are shaping up for the coming season and we all look forward to it...

IFOAM Coming to Santa Fe

Seeds of Change will host the first IFOAM (International Federation of Organic Agriculture Movements) Conference on Plant and Animal Breeding in Santa Fe, New Mexico from August 25 until August 28.

Both organic plant and animal breeding are in the early phases of development, although they have a great deal in common, primarily socio-economic aspects, but also genotype-environment interaction, genetic diversity, and robustness. Organic breeding includes the efforts of professional companies involved in the organic market, university-based researchers, as well as participatory initiatives between farmers and professional breeders.

The upcoming conference will encourage dialogue between commercial and subsistence farmers; scientists and practitioners; professional farmers and home-scale gardeners/livestock keepers to promote the lively exchange of experiences and perspectives on organic breeding. Our hope is that each field will inspire the other to develop and build upon successful strategies. Even though technical aspects may differ dramatically, organic farms ideally utilize integrated systems while maximizing the use of limited resources. Bringing both animal and plant breeding together in one international conference explicitly highlights the important interdependences and holistic approach of organic agriculture.

The conference will be divided into three sections for both animal and plant breeding: methods, socioeconomic aspects, and legal aspects. We will also be offering two tours as part of the conference: Picuris Pueblo and the Inter Tribal Bison Program on Tuesday August 25; Seeds of Change Farm & Gardens on Friday August 28; Santa Fe Farmers Market on Saturday August 29.

New Faces at Seeds of Change

As we continue to work towards strengthening our presence in the organic seed market and emphasizing education outreach programs at our farm in New Mexico, we are delighted to welcome 3 new associates to our Research and Development Team.

Terry Allan is our new Product Development & Sales Coordinator focused on professional growers on the West Coast. She is based out of Sebastopol, CA.

Lindsay “Gypsy” Dozoretz, one of our former interns, joins us as Marketing & Education Coordinator, Sustainability Lead. She is based out of SOC Farm & Gardens in New Mexico.

Eero Ruuttila brings a wealth of knowledge and experience from the award winning Nesenkeag Farm in Litchfield, New Hampshire to his new position as Research Farm and Gardens Manager in New Mexico.

Terry, Lindsay, and Eero were gracious to share their fascinating stories with us, read them below.

Richard Bernard,
Seeds of Change Research Director

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NEW FACES AT SEEDS OF CHANGE

http://www.seedsofchange.com/enewsletter/issue_70/new-faces.asp

Terry Allan

I gained my initial love of gardening picking strawberries from my grandfather's Victory Garden as a small child in the Blue Ridge Mountains of Virginia. But it was not until I served as a Peace Corps Volunteer in Kenya, working with subsistence farmers (mostly women) on water catchment systems, that I recognized the need to understand more about where our food comes from. On my way home from Kenya I spent 6 months in India. I happened to travel through the city of Bhopal just a few years after the 1984 gas disaster at the Union Carbide pesticide factory there. I met many survivors and activists struggling to recover from exposure to the poisonous gas cloud that enveloped the city and realized the tremendous unseen cost of our chemically based agricultural systems. It was then that I decided to become an organic farmer and advocate for safe, sustainable farming systems.

Since completing my studies in Ecological Horticulture at the University of California, Santa Cruz in 1991, I have worked as a farm manager, landscaper and designer in many diverse climates around the world. I also served as the Vegetable Research Manager at Johnny's Selected Seeds in Maine, a position similar to the work I am doing here at Seeds of Change. Just prior to joining Seeds of Change I returned to India for 4 years to volunteer at the Sambhavna Clinic in Bhopal. An independent initiative of the same friends I had met there before, the clinic provides free treatment to the gas-affected community of survivors using a pioneering blend of allopathy, Ayurveda (India's traditional system of herbal medicine) and Yoga. I worked to establish a 1-acre organic herb garden on the grounds of the clinic to produce the herbs used to make the Ayurvedic medicines dispensed. The three gardeners I trained continue to run this inspiring garden located in the shadow of the pesticide factory that caused so much suffering. To find out more about the clinic and garden, as well as the ongoing 25-year long struggle for justice please visit www.bhopal.org and www.bhopal.net.

I am so grateful to be a part of the incredibly important mission of Seeds of Change.

Terry Allan
Sebastopol, California

Lindsay Dozoretz

My first meeting of hand to soil came while studying abroad as an undergraduate at Cornell University. I spent a semester in Nepal on an anthropology program where I was given the opportunity to live in a remote village in the Solu-Khumbu region of the Himalayas. I had gone there to study women's inheritance rights, and found myself ankle-deep in a larger problem: the steep, mountain terraces upon which the women farmed their staple millet were collapsing, and the village was facing a severe food shortage. This experience woke me up to the realities of our global food situation. I began to realize the ways in which social inequities, environmental problems, and international policies influence the lives of individual people in specific locales everywhere in the world, by impacting how they farm and eat.

Returning to school, my studies shifted towards food systems and policy. I sought a farming apprenticeship at Blue Heron Organic Farm in Ithaca, New York. At Blue Heron I was initiated. I prided myself on being the fastest basil-picker, and could frequently be found barefoot between the rows of bountiful greens, pieces of kale stuck in my teeth. I loved the feeling of carrying a bunch of freshly-harvested beets by the stems, the round fruit dangling at knee-height, scarlet and glorious. I loved the spectacular emergence of Brussels sprouts from within their layered leaf packages. Even more, I loved working behind the array of produce at our farmers' market stand, and offering the colorful, delicious bounty to my community. It was a connection to food and eat-

ing and people that I had never felt before, and it changed the trajectory of my life.

After Ithaca, I returned abroad to work in agricultural communities. I went first to the Atlantic Rainforest in Brazil, where I engaged with coffee farmers looking for a more sustainable livelihood by growing organically. Then I went as a Peace Corps volunteer to Senegal where I spent two years coordinating sustainable agriculture programs in a remote community challenged by poverty, resource depletion, and changing ecological conditions. These experiences re-affirmed my commitment to sustainable farming practices, and the way that this type of relationship to food can bring health, prosperity, and hope to communities.

Before coming to Seeds of Change, I completed a dual Master's degree in International Affairs, Natural Resources and Sustainable Development with a focus in sustainable food systems. During these years of study, I had the privilege to spend a season doing a practicum as an intern on the Seeds of Change Farm and Gardens. Falling deeply in tune with the Seeds of Change mission, and inspired by the possibilities of the El Guique farm, I returned to the farm to write my Master's thesis, simultaneously beginning my involvement in outreach efforts, and sustainability initiatives at Seeds of Change. I am honored to now take on the position of Education and Marketing Coordinator, Sustainability Lead, and look forward to supporting the Seeds of Change endeavor, both within this community, and in the world.

Lindsay Dozoretz
Seeds of Change Research Farm, New Mexico

Eero Ruuttila

There was no garden in my backyard when I was young, living in the new suburbs of the early 60's in central Illinois. A farm, to my uninitiated eye, was one of those vast enterprises that seemed to stretch from Saint Louis to Chicago, nearly uninterrupted, in thousand acre blocks of feed corn and soybeans. I was ignorant of the human scale, of the relationship of loving hands nourishing a living soil, ignorant of multi-colored seeds sprouting armloads of joy-invoking flavor and good-health nutrition.

In college my interest in American and Asian literature lead me to some of the world's esteemed Nature writers: Thoreau, Gary Snyder, Basho, Su T'ung Po, and others. There were orchards and bamboo groves, herb gardens and fields of flowers, mountains and rivers and fireflies and loud roosters in their writings and during my discovery of these writers I also had the good fortune to travel. I lived a year in Finland, spent a semester in northern Thailand, worked a winter break in the Caribbean. I always ate the local foods; they were less expensive, fresher and better tasting than the tourist fare and always there was the discovery of something new.

Produce-purchasing experiences when I was traveling (fresh herbs for a Saint Thomas restaurant from a mountainside farmer; vegetables in Chiangmai's farmers' market for monks as barter for university living quarters) led to seven years of work experience post-college, as the local produce buyer for a New England consumer food co-op federation. I traveled to farms throughout New England to source fresh (and organic) produce for the food co-ops and experienced vicariously farmers' lives.

Home gardening became an extension of my work experience. While in Boston I helped organize a neighborhood community garden and in Harvard, Massachusetts my roommates and I tended a quarter-acre backyard garden.

Near the end of my tenure with the food co-ops I received a fellowship to write a handbook about the potential health risks of post-harvest pesticides. I had become concerned about exposure to post-harvest pesticide residues on conventionally grown fresh produce and the possible risks to warehouse workers as they were exposed to these materials in the enclosed environment of produce coolers. I also served during this time as Massachu-

setts' first organic farm inspector. As inspector I observed directly the plans and management practices of both small-and large-scale organic farms.

In 1987 I was hired as manager of a 40-acre nonprofit farm in southern New Hampshire (Nesenkeag Farm). My partner, Liana Eastman, who also shared a desire to farm, joined me. During the first years at Nesenkeag I transitioned the farm to its current organic certification status. For nearly 20 years, immigrant market gardeners from Cambodia (mostly middle-aged women) have been the farm's skilled harvest crew. They showed me how they utilize, creatively, different parts of the same vegetable plant for their traditional cuisine. They also introduced me to many traditional Southeast Asian vegetables and herbs.

I experimented with techniques I had learned from experienced organic growers, acquiring farm implements that fit the scale of the farm and contributed to improving farm soils and managing weeds. I spent many years learning how to fit green manure crops (combinations of legumes and grains) into the farm's crop rotation plans.

For the last decade Nesenkeag Farm targeted the high-end chef community of southern NH and Boston for most of its sales. Culinary herbs and vegetables, particularly salad greens and heirloom tomatoes, comprised the more than 100 crops grown at the farm annually.

Last year I trialed 30 varieties of spinach in spring and fall plantings for Seeds of Change. The farm also hosted a Seeds of Change Biodiversity tasting event for local chefs, small-scale farmers, and food writers.

These events with Seeds of Change led to an extended dialog with staff members and the eventual opportunity to come to northern New Mexico as the new Farm Manager of the Research Farm and Gardens. I envision many challenges as I experience the microclimate of the high desert Rio Grande Valley. And I am very excited to try my hand at growing out the extensive diversity of flowers, herbs, and vegetables Seeds of Change offers to its customers.

Eero Ruuttila
Seeds of Change Research Farm, New Mexico

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THE INS AND OUTS OF CHICKEN TRACTORS

BY EVAN SNOW

http://www.seedsofchange.com/enewsletter/issue_70/chicken-tractors.asp

What is a chicken tractor?

A chicken tractor is a portable part-time or full-time shelter for chickens, which provides them with continual fresh forage space (during the growing season) and provides their caretaker with the ability to control and focus their foraging and distribution of their manure. Chicken tractors come in all shapes and sizes and work in a variety of different situations. Most chicken tractors are homemade and the key ingredients are nothing more than creativity and resourcefulness. In its essence, a chicken tractor is a great way to nourish happy healthy chickens, in a manner which is easy to manage and will provide maximum benefit to you.

Chickens can be a simple and easy addition to anyone's garden or farm. They require minimal care and provide a number of benefits. Chickens can provide humans with food in the form of eggs and meat, fertilizer in the form of their manure, light cultivation through their persistent scratching of the ground, weed and insect control through their foraging efforts, learning opportunities for young and old alike, and can even be great friends. A chicken tractor will serve to enhance and amplify these benefits. The healthiest chickens are free-range chickens because they have fresh and varying food sources along with clean living space. When free-range is not an

option, a chicken tractor can provide very near free-range conditions without the risks of chickens eating your desirable plants or your pet dog eating your desirable chickens.

When designing a chicken tractor there are many options and variables to consider. The most common chicken tractor is of the closed-top open-bottom variety. The idea is that you build a structure over top of your chickens that provides them with shelter and protection while still allowing them access to the ground and confining them to a space enclosed on the top and sides. This can be as simple as a giant upside down “laundry basket” where the chickens spend their days and live in a permanent coop. It can also provide full-time residence if it is built with roosting space and nesting boxes. Another option is to build a completely enclosed chicken coop on wheels and provide forage space inside a temporary fence which is placed to create a perimeter around the chicken tractor. A third option is to place a chicken coop in a central location relative to your planting area and then give your chickens access to different sections of your garden on a rotational basis.

To help you decide which system is best for you, here are some questions to consider: How many chickens do you have or want and how much space do you have available? In a smaller space with fewer chickens an open-bottom tractor on wheels that provides all the necessities in the same place is a very good option. You can have as few as 2 or 3 chickens and still reap the benefits of their foraging and fertilizing activities by focusing their efforts in a small area. What do you want from your chickens? Do you just want eggs and a little meat or do you also want to effectively use the fertilizer and other services they provide? If your garden is more production and market oriented you may want to consider a permanent coop with rotational grazing options that will accommodate more chickens and minimize your time and energy inputs. When it comes to portable chicken tractors, the more chickens you have the more chicken tractors you have, and the bigger your chicken tractors are which means moving them on a regular basis requires more time and energy. What resources and materials do you have readily and cheaply available? Don’t go straight to the hardware store. Save yourself some money and look in your yard, garage, and neighborhood before you even start designing. Often a good design can sprout from a readily available material given enough time and creative thought.

My personal experience with chicken tractors has been in building portable shelters with roosting and nesting space included. My chickens live in a straw bale coop in the winter and spend the warm months grazing in the fields and orchard. The first chicken tractor I built is big enough for about 20 chickens and is basically a big box on wheels. The chickens spend the night inside the tractor and forage during the day in a space outlined by a portable fence. The chickens have a nice size area to forage in and are well protected during the night. With a 150 foot fence around the chicken tractor I only have to move it about once every two weeks. The problem with having such a big area to forage is that the chickens can be selective and won’t eat the weeds they aren’t interested in. This system works well in our orchard and for cleaning up larger areas of recently finished crops.

My second chicken tractor is currently under construction and will be the open-bottom type. It is long and narrow, designed to fit over the tops of our three foot wide beds. Among the resources I have available here at the Seeds of Change Farm is a huge stack of retired irrigation pipe. The pipes are thin-walled, light, and long but strong enough to support weight. This is just an example of how an available material morphed into a design idea. My chicken tractor is only three feet wide but twenty feet long so it is big enough to accommodate fifteen chickens.

One of my main concerns in designing my first chicken tractor was providing adequate protection from predators. I also wanted to be able to move it with human power alone. What I didn’t take into consideration enough was weight and ease of mobility. I ended up with an overbuilt box that is very secure but difficult to move. When designing a chicken tractor on wheels it is important to consider the materials used and amounts used. Also consider the placement of heavy elements like roosting space and nesting boxes relative to the wheels, point of contact to the ground, and the handle for moving. The simplest design is to have a handle on one end and two wheels on the other. This creates a big lever arm and it is most efficient to place your heaviest elements

close to the wheels or on the opposite side of the wheels from the handle.

Security is an important part of chicken tractor design but you don't have to sacrifice weight to keep your chickens protected. Assess the threat of predators in your area and design accordingly. Give them a secure place to sleep with solid walls and a solid floor. If you spend most of your time during the day on the same property as your chickens then your presence and quick response to signs of distress should be enough to ward off daytime predators.

To make sure that your chickens are comfortable in the confined space you build for them, provide them with adequate food, water, and shade. Consider ease of access when designing places for supplemental grains and water. If it is easy to give them fresh water every day then you are more likely to do it every day and more likely to have happier, healthier chickens. Shade is a simple, lightweight component of your chicken tractor and will increase the amount of time that your chickens spend foraging each day. Also make sure that you have easy access to any areas that need to be cleaned. A door that opens to the outside makes it easy to clean out bedding and to gather eggs every day.

The definitive guide to chicken tractor design is called Chicken Tractor by Andy Lee. It is the best place to start and provides information on various methods of chicken tractoring and the basics of chicken care. Keep in mind that every chicken tractor is unique and you will find the most success when you design to meet your specific needs. And don't forget that the best way to learn what your chickens need and want is to observe them. Sit down with your chickens and inquire. Watch and listen and you will learn more through direct experience than you could ever read in an article or book.

Evan Snow
Seeds of Change Research Farm Intern

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NEWS & VIEWS

http://www.seedsofchange.com/enewsletter/issue_70/news.asp

Seeds of Change Announces Dates of 2009 Farm Tours

The Seeds of Change Farm and Gardens will once again welcome visitors to experience the bounty and diversity of our home farm at the height of harvest. Come walk among the abundance; witness seed production and variety trials; and smell, touch, and taste the incredible expression of biodiversity demonstrated on our farm. See your favorite varieties come to life!

This year's tours will be hosted by Farm Manager Eero Ruuttila and staff. Scheduled dates are Saturday, August 15, Saturday, September 5, and Saturday, September 12 from 10:00 AM to 1:00 PM at our farm in El Guique. Directions can be found on our website at www.seedsofchange.com

Contact Lindsay Dozoretz, our Farm Education and Sustainability Coordinator, for more information or to reserve your place! Lindsay Dozoretz, 505.852.1508

Seeds of Change Launches Healthy Fundraising Program

Raise needed funds while increasing awareness and connection to healthy food sources.

Would you like to have a garden at your school, but don't have the funds to begin such a project? Are you looking for a fundraising method that supports a healthy food chain? Would you like to finance your school project

while promoting gardening in your community? Seeds of Change has re-affirmed our commitment to making our schools healthier by launching our Healthy Fundraising Program 2009.

Healthy Fundraising is a great way for school groups, sports teams, or community organizations to raise money for their project or initiative by selling organic seeds. The program encourages gardening and healthy eating, supports organic seed production and the conservation of biodiversity, and provides a tool for experiential education. Participating schools receive a free School Garden Starter Kit that includes seeds and garden markers to start or expand on a current school garden project. This is a great partner program in particular for schools with edible schoolyards, or that participate in farm-to-school programs, or that simply wish to bring food and healthy eating into their curriculum.

Healthy Fundraising – a reminder that healthy food and a healthy community starts with healthy schools. See www.seedsofchange.com for more information and for our fundraising brochure.

Organic Champion Kathleen Merrigan Nominated for No.2 Spot at USDA

On Feb 23rd, 2009, President Barack Obama nominated organic champion Kathleen Merrigan for the position of Deputy Secretary of Agriculture, the number two slot at the USDA behind Secretary of Agriculture Tom Vilsack. Merrigan has been called “the mother of organic” for her instrumental role in crafting the National Organic Program that established the rules for national organic standards in 1990. At that time she was head of the Agricultural Marketing Service. Currently director of the Agriculture, Food and Environment MS and PhD program at Tufts University, Merrigan has also served as a consultant for the United Nations Food and Agriculture Organization, and has worked at the Wallace Institute for Alternative Agriculture. She is a current board member of The Organic Center, and was named one of the “Sustainable Dozen” – a group of ideal nominees for Agriculture Secretary put forth by the agricultural advocacy group Food Democracy Now! Merrigan has been a long-time advocate of sustainable and organic agriculture, campaigning to move farm policy towards conservation practices and sustainable land use. As a professor at Tufts, she has been involved in programs to expand community gardens as well as to integrate food and gardening education into school curricula. As of this writing, a date has not yet been set for Merrigan’s confirmation hearing.

An Organic Garden on the White House Lawn

While Obama was still campaigning for the democratic primary, participants in the WHO Farm campaign drove a retro-fitted school bus around the country outfitted with a greenhouse and tomato plants on the rooftop. Why? To encourage the Obama administration to take a public stance on food and farming by converting 18 acres of lawn in front of the White House into an organic garden. This idea, to plant an organic garden on the White House lawn, has been championed by citizens across America, from Alice Waters to Michael Pollan to the 75,000 petition signatories to a proposal called ‘Eat the View.’ Eat the View, coordinated by Kitchen Gardeners International, began as a posting to OnDayOne.org, a Web site where people could make suggestions to the next president, and has developed into a movement, urging our president to showcase organic gardening on his own doorstep. Michael Pollan supported this suggestion in his New York Times article calling for a ‘Farmer-in-Chief’, and Alice Waters offered forth her services as an advisor to Obama’s kitchen cabinet.

Eat the View claims that the campaign to grow food on the White House lawn is almost as old as the nation itself, dating back to the first vegetable garden planted at the White House by John Adams in 1800, and that this is a ripe time in history to revive the idea of a Victory Garden—this time an organic one. Since Obama has taken office, the Eat the View agenda has been awarded the Grand Prize as OnDayOne.org’s winning idea for a better world. Last Friday, it became apparent that Obama agrees, and the idea leapt out from the computer screen and onto real White House earth.

On Friday March 20, 2009, First Lady Michelle Obama broke ground on the White House lawn for an 11,000 square foot organic garden. Helped along by twenty-six elementary schoolchildren wielding shovels, digging forks, rakes and wheelbarrows, Michelle and other White House staff prepared the soil for the planting of over 55 varieties of organic vegetables, herbs, fruits and berries. The harvest from the garden will feed the first family, and be used for catering White House dinners. Michelle Obama has also declared the garden a means to educate children and communities about healthy eating.

While there is yet to be a report of Obama seeding the first White House carrot, he has commissioned the White House chef to cook with organic foods, and has placed on his official Rural Political Agenda a clause to 'encourage local and organic agriculture.'

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LETTER TO THE EDITOR

http://www.seedsofchange.com/enewsletter/issue_70/letter-from-john.asp

Dear Seeds of Change,

Bless you all for this wonderful website, your wonderful farms, and especially for the inspiration. I have no questions and certainly no answers -- just gratitude for the amazing influence you've had on me. I absolutely love visiting your web page to learn from you and to get ideas for growing and gardening. It's amazing, after viewing your web site a couple of times, I can honestly tell you that your company has connected with me on an emotional level. I appreciate your genuine approach to teaching others and providing home gardeners with superior products and a wealth of well balanced knowledge. Based off of the web page and all that I have read regarding your company, I am very excited to place an order for my home garden from you sometime soon. I have been fascinated with gardening ever since my grandfather introduced me to this art at a young age and you have inspired me to get out there and make the best of what I have. If your vision is to motivate others, you certainly have succeeded!

Anyways, I just wanted to write to let you know how much I appreciate your site. I am anxious to place my order and receive your seeds. I have a genuine interest in learning more about your company and your farms. To everyone at Seeds of Change, your congeniality, your mission, and your vision are an inspiration to us all.

Gratefulness is a shallow word for what I feel. Love and admiration seem cliché. Perhaps only a simple thank you will do.

~ John S

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Letters should include your full name and location and may be edited for purposes of clarity and space.

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