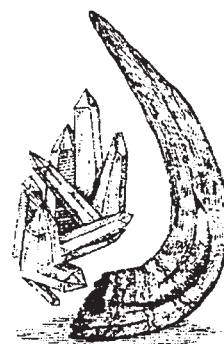


Applied BIODYNAMICS®



Autumn, 2011

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Issue No. 74

Putting a Spin on SPIN-Farming® and Taking Biodynamics to the City

Abigail Porter Interviews Linda Borghi

Linda Borghi, educator for SPIN-Farming®, is spinning together the threads of SPIN-Farming and biodynamics in her workshops and trainings. Her enthusiasm, humor and intention have led her to be an innovative problem solver and she has become a passionate advocate for biodynamics.

SPIN-Farming or Small Plot INTensive is a system that provides a business model for commercial agriculture production on an acre or less and is especially suited for urban environments. It overcomes two major obstacles to farming – the need to own land and high start up costs. The focus is on fast growing, high value crops, and relay or successive plantings. The SPIN business plan can incorporate a variety of direct marketing-based income streams including: CSA or buying club, farmers' markets, and restaurants. It provides a weekly work flow plan, estimated start up costs, operating expenses and target income based on the number of 2' x 25' crop-production beds and what kind of produce is grown. The goal is to generate \$100 per bed per planting with three-four successive plantings per season. This approach is dependent on a ready market with strong demand for quick growing, and higher end produce such as salad mix to generate the estimated gross income of \$50,000 to \$60,000 for one-half acre in production.

The SPIN-Farming system was developed by Canadians, Wally Satzewich and Gail Vandersteen of Wally's Urban Market Garden in Saskatoon, Saskatchewan. They began growing for market more than twenty years ago on a one-acre plot outside of Saskatoon. Thinking more acreage was critical to their success, they purchased a farm forty miles north of the city and eventually grew about twenty acres of vegetables on irrigated land. Too often challenged by animal and insect pests, damaging weather, and fluctuating water levels inhibiting irrigation, they decided that urban gardening was easier and more profitable. They sold the farm and went back to the city to farm twenty-five backyard garden plots ranging in size from



Linda Borghi harvesting lettuce

500 square feet to 3,000 square feet, with growing areas totaling one half acre. According to Satzewich's experience, "urban growing provides a more controlled environment, with fewer pests, better wind protection and a longer growing season."¹

In 2003, SPIN-Farming came to the United States and was trialed in Philadelphia, Pennsylvania. At the time, Roxanne Christensen, manager of the trial, wanted to prove that urban

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Editor's Note

Welcome to our fall issue! Abigail Porter did a wonderful job interviewing Linda Borghi and introducing us to SPIN-Farming. The growing popularity of this mostly urban agricultural movement is just one more model we can cling to when we need hope that the world and the earth are going to be okay. The beauty of the SPIN movement is that farmers are turning over ground in small plots, primarily tucked into populated areas. The farms are in and among people and neighborhoods. Additionally, SPIN provides land access and income to farmers, and improves both urban food security and untended, neglected land. I came across this quote from Rudolf Steiner recently while reading *Esoteric Christianity and the Mission of Christian Rosenkreutz* (GA 130): "It is a paradox perhaps, but it is true to say that those people who live in towns and have to forget what oats, wheat and barley look like, unfortunately get separated in their hearts, too, from the deepest moral sources of their existence....moral life being the highest thing we can strive for in this life." This powerful statement shows that we can not underestimate the importance of exposing people to how their food is grown, where their food comes from, and ideally, inviting them to become participants in that process. Incidentally, it might be interesting

to some to learn that Steiner gave the above-mentioned lecture in 1911, almost thirteen years before he gave his lectures to farmers. It shows the extent to which he was thinking about and connecting with the esoteric impacts of agriculture for many years before the Polish farmers came to him seeking insight and biodynamics was officially born in Koberwitz.

Other points of business for this issue... the JPI staff and board would like to welcome Ms. Porter as the newest member of JPI's board of directors. If you haven't been to JPI's website lately, please take a minute and visit the site. Books and biodynamic preparations can now be ordered online, there is additional information about JPI events, and you can sign up for JPI's newsletter to receive periodic updates of preparation-related news. Please take note of the events on page 11.

I hope your fall gardens are healthy and productive!

Warm greetings,
Christy Korrow

Applied Biodynamics

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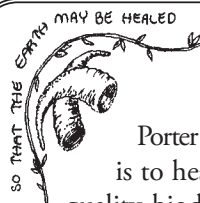
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A Message from Our New Board Member

"It is an honor to serve on the board of the organization bearing my mother's name. With Hugh Courtney's leadership and management, JPI has greatly expanded the knowledge, availability and use of the preparations in ways my mother had only dreamed of. I look forward to working with all of the board members on the critical task of moving the preparation work forward."

— Abigail Porter



Mission

The mission of the Josephine Porter Institute for Applied Biodynamics, Inc. is to heal the earth through production of quality biodynamic preparations based on the spiritual scientific discoveries of Rudolf Steiner and to advance education and research in biodynamic agriculture.

Board of Directors

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Putting a Spin on SPIN-Farming® and Taking Biodynamics to the City

farming could be economically viable. Christensen co-founded Somerton Tank Farms which became a half-acre demonstration urban farm and test plot for the SPIN-Farming method from 2003 to 2006 with the goal of generating \$50,000 gross per year from a half acre within five years. The farm was operated in partnership with the Philadelphia Water Department, with support from the Pennsylvania Department of Agriculture, and other city, state and national agencies and organizations. In the first year, the half acre produced \$26,000 in gross sales, in the third year, one year ahead of schedule, the farm surpassed \$50,000 in sales, and in 2006, the fourth and final year, sales were \$68,000. Christensen and Satzewich have since produced the SPIN-Farming online business guides and SPIN-Farming Basics, a textbook which outlines the system.

According to a feasibility study done at Somerton Tank Farms and funded by Pennsylvania's Department of Community and Economic Development, by extending the growing season with high tunnels or a greenhouse, a half-acre, with two hundred beds and up to four rotations per bed, could generate up to \$120,000 gross sales.³ In 2009, the National Center for Appropriate Technologies (NCAT) partnered with SPIN-Farming, LLC to encourage the growth of urban agriculture using SPIN methods. NCAT is a federal program targeting the advancement of a wide range of sustainable energy and agricultural approaches.⁴

Abigail Porter: *Linda, I read in your bio on the SPIN-Farming website that you started your career in 1977 managing four-star restaurants in New York City and then, in 1988, you jumped into farming, starting Abundant Life Farm on Block Island, Rhode Island. You became the first person with a one-*

cow herd to get a license to sell cheese to the public. That was a pretty drastic change. What motivated you to make that move?

Linda Borghi: I was always very interested in farming. I felt like a farmer managing restaurants. I enjoy physical work. That's something I was lacking, sitting behind a desk. I became burned out working in New York and wanted to have a different lifestyle. My husband and I went to Block Island for our tenth wedding anniversary. And that was it, I just knew this was the place I was looking for and that we had to live there. That's exactly what we did. I had children, and that was another reason why I wanted to move out of where I was living in Bergen County, New Jersey. At the time, there were a lot of kidnappings in the area. I wanted to get them out of there and give them a different life.

AP: *And why farming?*

LB: I attribute my interest in farming to my grandmother in Italy. We were living outside of Rome for two years when I was young. My father had to go on a business trip and he took my brother and me to my grandmother's house in the countryside outside of Venice. Now, we didn't speak any Italian, but for whatever reason, I understood every word that woman spoke. After he dropped us off, she asked us if we were hungry, and I said yes. And she said, "well go outside and catch a chicken." So, I went out there and I could not catch a chicken for the love of Pete. It seemed like I was out there for hours, but then I was only seven years old and everything seems longer then. My grandmother came out of the house and I could tell she was a little aggravated. She was all of four feet tall. Without even looking down, she picked up a chicken and she twisted its neck. After that, I followed her like she was a goddess. We went into the house, she cleaned the chicken and before long, I was sitting down to a bowl of chicken soup. At that moment, I became a farmer because I had it in my mind that when I grew up, I wanted to be just like her. This was contrary to my brother's feelings. He cried and didn't eat a thing for the five days that we were there. It was that experience that brought me into the farming world. So I always had that in my mind, it was always my passion although I was not able to fulfill it until later because of life circumstances.

AP: *Small farmers often run into obstacles with regulatory agencies. Was it difficult to get the license to sell cheese?*

LB: No, not all. It was all legal beagle. When I told the man at the health department how big my herd was, he laughed so hard that I started laughing too. I had found out what I needed to do and did it. I followed all the regulations. When I found out that the smallest pasteurizer available was 500 gallons, I located a 5-gallon double boiler from a restaurant supply company. I sat that pot on the table

Biodynamic Preparations Legend

BD #500 – Horn Manure

BD #501 – Horn Silica

BD #502 – Yarrow

BD #503 – Chamomile

BD #504 – Stinging Nettle

BD #505 – Oak Bark

BD #506 – Dandelion

BD #507 – Valerian

Compost
Preparations

BD #508 – Horsetail (*Equisetum arvense*)



Lettuce beds

and for two weeks I told her that she was going to be a pasteurizing machine when she grew up. Then it dawned on me, I wondered where pasteurizers were taken for repair. So I called the health department, and I was directed to a company in Boston. I sent them the double boiler and they were able to retrofit it with everything that the 500-gallon model had. Five gallons was what my Jersey was giving me in a day, and I made the milk into fresh mozzarella, farmers cheese and ricotta from the whey. Then I doubled production by “renting” an additional cow for the summer. I contacted the farmer I had purchased my cow from and paid him what he would have received in sales from the milk and we became a two-cow dairy for the season.

But I’ll tell you, the pasteurized cheese was completely different than the fresh mozzarella I was making on top of the stove, which had the taste of the earth in it. The pasteurization process just killed everything. Then I had to add the inoculant that came in on dry ice from Canada. You’ve killed everything and now you have to put it back in. It was senseless and the cheese did not taste the same.

AP: *Getting the double boiler retrofitted and renting an extra cow, that was ingenious.*

LB: It’s funny, I don’t think of it that way but in retrospect I guess it was. For me it was just like a normal course of events.

AP: *And you had no previous farming or gardening experience before you went to Block Island?*

LB: None. Well, we lived in a house in New Jersey on a 75 × 100 foot lot. Burpee must have thought I had a palatial place by all the seeds I bought. Every square inch of our property had something growing on it.

AP: *You had not worked with animals before?*

LB: No. I also had twenty-three sheep. I raised the sheep for wool. I sheared them, carded and spun the wool, and then made sweaters, scarves and hats for sale. And chickens, I had a flock of fifty Rhode Island Reds. I farmed ¼ acre by hand and was comptroller of the public utility, Block Island Power, as well.

AP: *That’s a lot for a beginning farmer to take on. What did you use as resources for learning how to take care of the animals?*

LB: I read and talked to farmers, nothing different than what I do today other than going on the internet to get information.

AP: *When and how did you first learn about biodynamics?*

LB: It was about thirteen years ago, in 1998, an organic farmer in Bergen County, New Jersey sent me up to the Pfeiffer Center in Chestnut Ridge, New York. I had been asking him all kinds of questions. He felt by the type of questions I was asking him, that biodynamics would be right for me because it was involved with the spirituality of food and with the spiritual aspects of growing food. He told me to go up on a Friday, have lunch at the community center, meet the people and see if it worked for me. I did and it did. Not too long thereafter, they advertised for an intern. It was synchronicity really. I was interviewed, accepted the position at the Pfeiffer Center, and moved my family up there. That's where I learned about biodynamics, that's where I got "hooked" on it. I had never heard of it before. I was hooked from that point forward and now I believe that all food should be grown biodynamically.

AP: *So it was the spiritual aspect that was the "hook" for you?*

LB: Yes it was the spiritual energy of the food. For a long time, I had a sense that a plant was not just physical, that it had a spiritual side to it. I had different encounters in my life with the plant world that were not normal, sensing the nature spirits, having them around me, seeing them. But I didn't share this with many people because then you are verifiably nuts. So after the first visit to the Fellowship Community Center and the Pfeiffer Center, I started doing some research and knew that it was something that was right for me. In fact I just had such a strong feeling, it was almost like déjà vu with Steiner. It was like I was remembering rather than learning something new. Now I have come to believe that a part of us knows everything and it is basically a remembering process. It is just that we must become aware and reconnect to that memory and knowing.

That was my first experience with biodynamics, and I've been at it ever since. When I say, "at it ever since," I haven't been farming ever since but I have been advocating and talking about it, informing people. I feel the information needs to be shared, so there won't be as many people like myself who have never heard about biodynamics. That's where my strength is, that's what my main purpose is, to tell people about it, to pass the information on and then to send them to the right individuals who have more knowledge in the area of biodynamics than I do, the experts, because I am not an expert in anything. I know through my efforts, individuals have turned to biodynamics and continue to do so. That's why I do it...to plant seeds. I feel responsible for the sharing of the information.

AP: *And SPIN-Farming, when and how did that come into your life?*

LB: I came across it on the internet. I'm very passionate about information on farming, looking and investigating. This model came up, and I'll be honest with you, there have not been many models that I have even cared to read any further about. For whatever reason, this one just got me. I ordered the guides and I implemented it and I was shocked at how successful I was by implementing these very simple processes. It made a lot of sense to me and it was clear that it was an ideal urban model for growing food. It broke down the barriers that most people face when they are looking to get into farming: #1 – that you have to own land, which is a fallacy. There is plenty of land out there that people are willing to barter for food or just let you use; and #2 – that you need to have a lot of money to invest in all the necessary equipment – the tractor, the attachments, the irrigation devices – that's a fallacy as well. It's a business model and it gave me a structure, a business plan on how to farm. Before I even put a shovel in the ground, I knew what I was going to generate based on the number beds I had. Every bed on my farm has a minimum value of \$100 retail. So you just do the math according to how many beds you want to plant. Then it gives you direction with three streams of revenue: the CSA, the farmers' markets, and restaurants and what your target income should be for each of those based on the number of beds you have. It is a simplified process for organizing your business.

The greatest benefit for me is the on-line community. I have learned so much from this group. Once you purchase the guides, then you are put into the Yahoo group and you have access to six hundred SPIN farmers and their experiences and resources. When you have a problem or are up against something, you throw that question out there and you have people giving advice from all over the world. SPIN-Farming is now international in scope – Australia, the EU, Africa, in addition to many cities in the US and Canada. It's interesting, the international communities that have been contacting me for this information. Currently, I am supporting a group in Sierra Leone. They have started three SPIN-Farming "universities" so to speak, and hope to have it country-wide within a year. I have just been contacted by a gentleman in India who would like me to go there for a couple of months this winter to start up a SPIN farm. He is looking to do this as an agro-tourism business.

In 2006, after doing SPIN-Farming for myself on my home garden, I started advocating for SPIN-Farming as well as biodynamics. I felt that it was a good model – efficient, clear and easy to implement, and it's organic and seemed to be a good marriage with biodynamics. Since then I have taken it on the road and have gone out to teach about it.



Linda harvesting beets

AP: *What year did you become an official trainer for the SPIN-Farming organization?*

LB: About two years ago, in 2009, I started to give talks on SPIN-Farming. I gave a talk at the University of Maryland, the Small Farms Conference, the Pennsylvania Energy Fest, quite a few conferences here in the state of New York, the Local Food Hub Educational Farm in Charlottesville, Virginia this past March, and the Unitarian Church in Middleburg, New York. The Unitarian Church invited me back for the third time this coming September. In 2009 I was asked if I wanted to participate in the UN conference on “Food, Famine and the Future of Food Technology.” There were scientists from all over the world heralding the glory of GMO seeds and feeding the world. Not one of them spoke of the soil. I went as a biodynamic SPIN farmer and in my presentation I emphasized the difference between feeding the world and nourishing the world.

AP: *Do you include biodynamics in all of your presentations and workshops?*

LB: Yes, definitely. SPIN-Farming does not tell you how to take care of your land or build fertility so that’s where biodynamics fits in the mix. This is the way food needs to be grown because of the life force. I do see a lot more interest in this approach. I no longer feel like a fish swimming against the current.

AP: *What aspects of BD do you include? How deep do you go?*

LB: It depends on the audience and what they are looking for. Because SPIN-Farming doesn’t go deep into soil management, people are looking for more. I give a brief history of BD, the uses of the sprays and preparations, and I recommend that they start with the Pfeiffer BD Field and Garden Spray, BD #500 (horn manure), BD #501 (horn silica), BD #508 (*Equisetum arvense*/horsetail herb) and the Biodynamic Compost Preparations or the Pfeiffer BD Compost Starter. Some have started to use the preparations.

AP: *Do some of your clients request SPIN without the biodynamics?*

LB: No, in fact it’s just the opposite. People are searching now. They are sick and tired of being “sick and tired” because what they have been doing is not working. They are looking for a better way.

AP: *A couple years ago you moved to Walker Valley, New York and started the third incarnation of Abundant Life Farm. Tell us about your current operation.*

LB: This is the first year of commercial production on ¼ acre. We had to clear the land and terrace it. We went from forest to farm in eight months. We looked for flat land to purchase but there was nothing available in a reasonable price range. So we had to work with what we had. The soil had to be built up. I had 150 yards of composted cow manure delivered last June.

With the use of the biodynamic preparations and sprays, the worms are coming back. There is a lot of worm activity this year. It makes me happy to see how all my efforts from last year are working their way into the soil. This year I would like to learn more about the Three Kings Preparation.⁵

AP: *With only a quarter acre, the stirring and spraying can be accomplished without a lot of equipment that would be needed for larger acreage.*

LB: Yes, but I do have a 110 gallon Berthoud mist sprayer on the back of a 72 horsepower John Deere tractor and a 300 gallon vortex brewer.

AP: *So you could do custom spraying and stirring?*

LB: That was my goal and is my goal. I have always been ahead of my time. It hasn't happened yet but I'm ready.

AP: *What are you growing now?*

LB: I am growing lots of greens. I love growing greens. I'm growing parsley and coriander, chard, kale, dandelion leaves, and of course lettuce and spinach. In addition to the preparations, I plant according to the BD calendar. I feel it is important to use the calendar because of all of the research that has gone into it. I really follow it, and if I don't, I make note of it, and I have seen a difference.

AP: *I noticed on your website, that you have a Farmers Club. How is that different from a CSA?*

LB: I send out an email once a week with a list of what's available. Members order what they want. People are getting exactly what they want and not things that they won't use. There are thirty members this year and I also sell at a farmers' market in the Bronx. Next year I will add restaurants.

AP: *Where do you see the combined application of biodynamics and SPIN-Farming going from here?*

LB: There are lots of opportunities here and in other countries. Urban farming is growing. And SPIN works well in Third World countries like Sierra Leone. This week there is a meeting with a large seed company to see if they will pre-package seeds in SPIN size units for 1000 square feet and brand it for SPIN-Farming. Once SPIN-Farming evolves to be branded so that people relate SPIN to urban farming, I'm taking biodynamics along with it. We will have a larger audience of people who are interested in growing their own food. If we get enough people on board in urban settings at least they won't have to bring in such large amounts of food from elsewhere.

One market that we are tapping into right now is homeschoolers. There are quite a few homeschoolers who are very interested in the SPIN model. This is a way we could have exponential growth with our efforts. And we really need to get to the youth. They are the ones who are most valuable at this point.

In August, Roxanne Christensen and I had a meeting

with the people from High Brix Manufacturing. They are working with conventional farmers to help them transition to a more sustainable and profitable way of farming through the use of calcium, soft rock phosphate and compost teas. We met at an Amish farm in Lancaster County, Pennsylvania. That was the first time I was up close to GMO corn. We gave the farmer a SPIN-Farming book, and he has already contacted us with questions about marketing because they are not making it with the commodities that they are growing. I gave the gentlemen from High Brix a unit of the Pfeiffer BD Field and Garden Spray. I would like to see them add the Field and Garden Spray to the package that they are offering to the public. It would be good for biodynamics and it would be good for them. Because they are aware of and are working with the energy and nutrition of food, they are interested in biodynamic methods as well.

If the BD pepper spray for stinkbugs proves successful that would be really big. Anything that we can get out there that would be that mainstream would be so marvelous. I'm right here in apple and grape country and that would open a lot of doors for biodynamics.

I saw a list of the top ten careers for the next ten years, and organic farming ranked number three on the list. I feel the time is now. We need to be growing more healthy food with life forces to meet the challenges that we will be facing in the next five years and beyond.

AP: *Is there anything else you would like to add?*

LB: I thank Dr. Pfeiffer and Dr. Steiner everyday for bringing this knowledge to us.

AP: Thank you, Linda.

Notes

- 1) www.spinfarming.com
- 2) www.spinfarming.com; www.somertontankfarms.org; "Small is beautiful... and Profitable," Sullivan, Dan, archives of www.newfarm.rodaleinstitute.org
- 3) "SPIN in the City: A New Form of Farming That Can Transform Cities," Spencer, Miranda, *E-The Environmental Magazine Online*. June, 2009. www.emagazine.com/archive/4722
- 4) "SPIN farming: agricultural business planning on micro-scale land bases," Egan, Franklin, *Penn State College of Agricultural Sciences Cooperative Extension Newsletter*, Sept., 2009. www.extension.psu.edu/susag/news/archives/2010/08/4-spin-farming. Information in this article is from a presentation given at the Pennsylvania Association for Sustainable Agriculture (PASA) Farming for the Future Conference by Andy Pressman, Agriculture Specialist for The National Center for Appropriate Technology (NCAT). Mr. Pressman can be reached at andyp@ncat.org.

- 5) The Three Kings Preparation was created by Hugo Erbe. This preparation can be pre-ordered from JPI for potentization and application at the appropriate time: December 31 and January 6.

References and Resources

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 Coleman, Eliot. *Four-Season Harvest: Organic Vegetables from Your Home Garden All Year Long* (Chelsea Green, 1999)
 Jeavons, John. *How To Grow More Vegetables: And Fruits, Nuts, Berries, Grains and Other Crops Than You Ever*

Thought Possible on Less Land Than You Can Imagine (Ten Speed Press, 2004)
The North American Biodynamic Sowing and Planting Calendar. (Maria Thun, ed.)
Stella Natura: Biodynamic Planting Calendar, (Sherry Wildfeuer, ed.)
The Power of Community (DVD)
www.communitysolution.org
 Abundant Life Farm, Linda Borghi,
www.abundantlifefarm.com
 High Brix Manufacturing, www.highbrixmanufacturing.com
 Transition Towns, www.transitionus.org

Anecdotes and Antidotes – Biodynamics at Work

Hugh Courtney, founder of JPI, answers reader's questions

Q: *What is the difference between Maria Thun's planting calendar, The North American Biodynamic Sowing and Planting Calendar, and the Stella Natura biodynamic planting calendar?*

A: The Thun calendar is based on actual plant research by Maria Thun (and now, her son, Mattias as well), and is geared much more toward practical growing using biodynamic practices. *Stella Natura* relies on research findings from the previous year's publication in the Thun calendar, and presents articles of interest on broader facets of biodynamic or anthroposophical subjects. In some respects, the *Stella Natura* allows more recording of observations, and a larger, perhaps easier to use format. They both are valuable tools for the biodynamic practitioner. It is more a question of personal preference, but if I could only consider one and not both, from the practical grower's point of view, one might favor the Thun calendar. In doing so, one would perhaps miss out on some very cogent and stimulating essays to be found in *Stella Natura*.

Q: *Can you recommend brands or types of category 1, 3-point hitch, 50 gallon, 12 foot-17 foot boom sprayers for use with the biodynamic sprays? Is a diaphragm pump or piston pump better, and is venturi agitation (recirculation of the liquid verses mechanical agitation) acceptable? As usual, price and quality will have to balance out.*

A: Virtually any brand of sprayer meeting your specifications (category 1, 3-point hitch, 50 gallon, 12 foot-17 foot boom sprayer) should be serviceable. We have put together our own rig using a 60 gallon tank mounted above a spike tooth harrow, with spray dispersed through a Spraying Systems Co. boom-jet nozzle #5880 #2 mounted behind the tank. Pumps we have used include both diaphragm and piston. We get width coverage at least equal to or well beyond your specs above.

As far as pump is concerned, Alex Podolinsky in Australia recommends a diaphragm pump as being less "harsh" on the preparation being sprayed. Agitation per venturi should be fine, with mechanical agitation during spraying application also okay.

Tank agitation for stirring the biodynamic preparations is not an adequate substitute for the hour of hand stirring or using a specially built stirring machine or a vortex brewer which creates a proper vortex and allows for frequent reversal of stirring direction.

I hope this addresses your question.

Q: *How do we apply the BD #508 (Equisetum arvense horsetail) to the compost pile? Is it the same as with BD #507 (valerian) – do we add a few drops, or do we use dried horsetail? And how much?*

A: The usual recommendation is to take 4 cups of the fermented horsetail tea and apply 1 cup each to the north and south ends of the pile and then 1 cup each at the mid-points (or east/west) of the pile. Make a hole to pour each cup into at the usual depth of the regular preparations, and then close up the hole. You will have applied it to the four sides of the windrow compost pile. You should observe a more even distribution of moisture throughout the pile, that is, no wet spots, and no hot or dry spots (so-called "fire-fanging"), and a more uniform and homogenous finished compost. We do have a graphic drawing depicting the placement available upon request (email info@jpibiodynamics.org).

Q: *I was hoping you could recommend what I need to purchase for a beginner biodynamic composter to get started. I will be composting a year's worth of horse manure this spring for use this fall. Any publications that you could recommend would also be appreciated. I did look through your website thoroughly*

but I'm not sure on the amounts since the amount of manure I am composting is larger than a family garden needs and smaller than a working farm. Thank you for sharing this valuable information.

A: Is it only biodynamic composting that you are wanting to know about, or do you intend to use the spray preparations as well this year? We would need to have an idea of either tons or cubic yards of manure involved. One ton equals 1 1/3 of a cubic yard by thumb rule. A set of compost preparations, BD #502-507, will treat ten tons or more. A ten ton pile would be a compost pile 6-8 feet wide by 4-5 feet high and 21 feet long. A unit of Pfeiffer BD Compost Starter will treat 1 to 1 1/2 tons. That would be a cube measuring approximately 5 feet long, 5 feet wide and 5 feet high. Finished compost application target for a market garden is usually 10 tons to the acre, with pasture or hay land receiving only 1 or 2 tons. Cropland would be somewhere in between depending on the crop. If the manure is sourced from your own animals, it would be a good practice to use the Pfeiffer BD Compost Starter as a periodic treatment in the stable or barn yard. A biodynamic treatment needs to start as early in the composting process as possible. Horse manure that is already a year old will have lost considerable nutrient value from out-gassing of ammonia and carbon dioxide. In any case calculate your tonnage, and then you will know how much Starter to use, or how many sets of compost preparations to use.

If you want to begin to treat your soils biodynamically this coming spring, we recommend that the soils of each acre be treated either with the Pfeiffer Field and Garden Spray, or a combination of BC (Biodynamic Compound Preparation a.k.a. barrel compost) and BD #500 (horn manure). We have those available in units sized to treat an acre. If you have less than an acre, at least to begin with, we recommend that a full unit of the BC and BD #500 be used, since you are actually creating a biodynamic energy field or force field, and the unit size dosage is the minimum force field to be created, in our view. With the Pfeiffer Field and Garden Spray, one would activate only as much as would be needed to treat the area to be covered (up to one acre). One tablespoon of this product treats 3000 square feet, and there are several tablespoons in a unit.

Publications to be recommended initially are those marked with an asterisk (*) on the reverse side of the order form in our *Product Catalog*. But usually, a basic how-to-use booklet such as Corrin, *Handbook on Composting* or Pfeiffer, *Using the BD Compost and Spray Preparations* is a good place to start. A more comprehensive overview can be obtained from Storl, *Culture and Horticulture*; Pfeiffer, *Soil Fertility*; or Podolinsky, *Biodynamic Lectures*, Volumes 1, 2 and 3.

Please examine our Associative Contract concept as a possible solution to starting you out right in biodynamics.

Book Reviews – Newly Received Titles

JPI has recently added the following new titles:

Osthaus, Karl-Ernst, *The Biodynamic Farm: Developing a Holistic Organism*, Floris Books, Edinburgh, Scotland, UK, 2010. (First published in German in 2004). 93 pp. \$14.95

To my knowledge this is one of the few available titles in biodynamic literature that makes an effort to address Rudolf Steiner's concern that the farm "individuality" ought to possess the "due amount of cattle." Steiner expressed that concern at the very beginning of the second lecture of the *Agriculture* course, and while many people have subsequently spoken and written about the farm individuality, the author of this book has managed to translate that term into a practical example of how that individuality manifests through the animal kingdom on a specific farm. In developing his own farm, Karl-Ernst Osthaus apparently took very seriously the question of determining the "due" number of cattle, sheep, pigs, chickens and other animal members of a proper biodynamic farm individuality.

While his experience must be seen in the context of his particular farm, it is most helpful to have such a picture available in developing one's own farm. He gives a very specific emphasis to the development of hedgerows between fields not only as a "fence" to separate pastures, but also as important forage for the livestock and habitat for the birds, insects and other wild animals.

It would have been most helpful if the author had provided more details on exactly how he arrived at the several livestock populations. Regrettably, he is deceased, and one cannot seek answers to some of the questions that might arise when reading some of his statements and conclusions. However, that forces one to arrive at answers for one's own farm individuality, which is precisely how it should be for the biodynamic practitioner.

The one major criticism of the book I found is his description of the production of the preparations in the latter part of the book. In several instances, his description deviates from Steiner's indications in ways that I would judge quite serious and such as would affect the ultimate

efficacy of the finished preparation. Digging up BD #501 (horn silica) at Michaelmas does not qualify as “late fall” as Steiner’s instructions state. “BD #502 (yarrow) is made in early summer, hung in a sunny place, buried around Michaelmas and dug up at Easter, and the contents of the bladder are stored in an earthenware pot.” This is a process which ignores Steiner’s requirement that the yarrow spend a full year in the bladder. Unfortunately, the time frame described seems to be a practice that is widely followed among biodynamic practitioners, to the probable detriment of the finished preparation. In like manner, the author’s description of the making of BD #504 (stinging nettle) omits the indication Steiner gave that the stinging nettle should spend the winter in the earth and through the following summer. I believe most sincerely that we cannot allow ourselves to blithely ignore the complete indications Steiner gave for the making of the biodynamic preparations. To do so can only be a detriment to achieving the maximum quality and effectiveness of the resultant preparations. It is most distressing to realize that somehow over the years certain modifications have crept into the instructions for making the preparations and are subsequently perpetuated in otherwise valuable biodynamic writings.

Petherick, Tom, *Biodynamics in Practice: Life on a Community Owned Farm, Impressions of Tablehurst and Plaw Hatch, Sussex, England. Photography by Will Heap*. Sophia Books (an imprint of Rudolf Steiner Press), Forest Row, England. 132 pp. \$38.00

This book features an abundance of photographs (thus the expense) detailing the transition of two struggling farms to ownership by an entire community. These two farms in the immediate neighborhood of Emerson College in England formed a cooperative beginning in 1995 with the people living in their vicinity to establish themselves as a major focal point of the community. The text and the photographs describe the many aspects of both farms and the important role they have within the surrounding community. The message of the book is stated as follows: “Biodynamics seeks the holistic and interrelate health of the diverse creatures and beings composing a farm, including human beings and the wider, surrounding community.” Biodynamics is identified as not

just a “method” but a whole approach to life. The model developed here is one that may be highly appropriate for emulation in England, but it is probable that other parts of the world will need to develop their own unique models of biodynamic farming support within a surrounding community. One such example that comes to mind is the Sekem endeavor in Egypt (www.sekem.com).

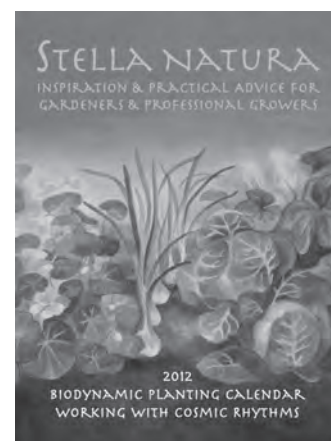
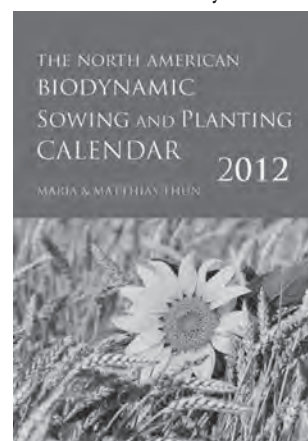
The lack of captions for the photos in at least a few cases is a drawback to the message being communicated, but altogether the book presents a very positive case for biodynamic agriculture as an important factor in influencing the culture within society as a whole.

2012 Planting Calendars Available

The North American Biodynamic Sowing and Planting Calendar 2012 by Maria Thun and Matthias K. Thun
Floris Books

64 pages, 5¾ × 8¼ inches; \$13.95

The original biodynamic sowing and planting calendar, now in its fiftieth year.



Stella Natura 2012 edited by Sherry Wildfeuer

40 pages, 9 × 12 inches, \$14.95

Astronomical charts and interpretations to help with the timing of gardening and farming activities, with articles that turn one’s attention to the larger connections that underlie our life on earth.

All titles referenced on pages 9 and 10 are available from JPI for the above-mentioned prices, plus \$7.00 shipping and handling per order.

“Now we must form the picture that in winter the earth is most of all self-contained, enclosed in itself. It has drawn back everything of a spiritual nature which it had allowed to stream out from itself during the summer. Hence in the depths of winter the earth is more earthly, more truly itself, than at any other time.”

Rudolf Steiner – *The Four Seasons and the Archangels*, p. 14

Upcoming Events at JPI

Wednesday, October 19 – Sunday, October 23: Annual Fall Workshop – Session One

Harvesting of sheaths, and the making of the biodynamic preparations. Five days of hands-on workshops and lectures. Guest speaker – Gena Nonini, Marian Farms, Fresno, CA. All meals included in the price. Some housing available, tenting permitted. Cost: \$500.00

Wednesday, November 9 – Sunday, November 13: Annual Fall Workshop – Session Two

Harvesting of sheaths, and the making of the biodynamic preparations. Five days of hands-on workshops and lectures. Guest speaker – Gunther Hauk. All meals included in the price. Some housing available, tenting permitted. Cost: \$500.00

Saturday, November 12 – 9:30 am to 1:30 pm: Animal Pests Ashing Workshop – Venus in Scorpio/Moon in Taurus

Join us to learn about the biodynamic technique of ashing which is grossly under-utilized. Ashing (or “biodynamic peppering” as it is also called) is an effective means for farmers and gardeners to deal with pests, be they, weed, insect or animal. Lunch is included in the price. Cost: \$75.00

Monday, November 14 – 12:30 pm to 4:30 pm: Animal Pests Ashing Workshop – Venus at the High Conjunction of Scorpio

Join us to learn about the biodynamic technique of ashing which is grossly under-utilized. Ashing (or “biodynamic peppering” as it is also called) is an effective means for farmers and gardeners to deal with pests, be they, weed, insect or animal. Lunch is included in the price. Cost: \$75.00

Thank You for the Dandelion Blossoms

Thank you to the numerous individuals and groups who collected and contributed their dried dandelion blossoms, yarrow blossoms and Equisetum to JPI. Would you like to harvest dandelion or other preparation plant materials for JPI? If so, contact JPI for details on how to harvest.

Waldorf School on the Roaring Fork – Carbondale, CO
Michele Fair – Black Mountain, NC
Susan Peterson – Flint Hill, VA
Anne Wilder Chamberlian – Priest River, ID
Petra Zinniker – Elkhorn, WI
Dylan Ford – North Babylon, NY

Saturday, December 3 – 9:30 am to 4:30 pm: Making Horn Manure (BD #500) Preparation

Lunch will be served. No fee.

Regional & National BD Events

Tuesday, December 6 – Wednesday, December 7: Pre-conference Workshop at Acres USA – Bringing Biodynamics Down to Earth – from Cosmos to Compost

Gena Nonini will teach how to implement biodynamic practices in a commercial-scale farming enterprise while Hugh Courtney will focus on the biodynamic preparations. To register, call Acres, USA at (800) 355-5313 or go to the conference website at www.acresusa.com/events/events.htm. Cost for the two-day workshop is \$295.

Friday, January 27 – Sunday, January 29, 2012: North Central Region Biodynamic Group Gathering in Viroqua, WI

The North Central Region Biodynamic Group Gathering will occur from Friday, January 27–29 at Pleasant Ridge Waldorf School in Viroqua, Wisconsin. Craig Holdrege of the Nature Institute will present “Schooling Observation: Exercises in a Goethean Approach to Nature Study.” Contact: Brian Wickert (608) 637-8890, bwickert@frontiernet.net.

Thursday, March 1 – Sunday, March 4, 2012: Fellowship of Preparation Makers Annual Conference: Harmonizing Heaven and Earth Through the Polarities of BD #500 and BD #501

Hosted by the Valley Organic Growers Association in Hotchkiss, CO. Details at www.vogaco.org.

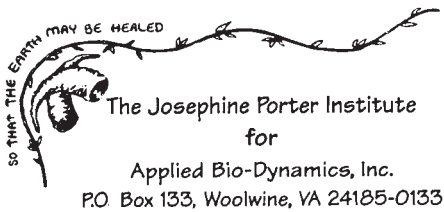
Ancestry Herbals – Twisp, WA
Florence Rewinski – Hampton Bays, NY
Glenn Thompson – Owensboro, KY
London Waldorf School – London, ON Canada
David Yoder – Fairchild, WI
Mary Yoder – Fairchild, WI
Stephanie Cole – Danielsville, PA
Samantha Embrey – Piney River, VA

Yarrow and *Equisetum arvense*

Conrad Mentjes and Mary Lee Plumb-Mentjes – Anchorage, AK

“With enthusiasm, great effects can be called forth.”

Rudolf Steiner – *Agriculture*, pg. 78 (Adams translation)



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