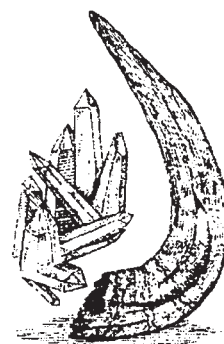


Applied BIODYNAMICS®



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Issue No. 79



Harvesting rye on With the Grain Farm

Finding Rhythm and Meaning in Fields of Biodynamic Grain

An Interview with John DeRosier by Hunter Francis

John DeRosier is a biodynamic farmer in northern San Luis Obispo County on the central coast of California and owner of With the Grain Farm. His dream is to see grains increasingly celebrated for their enormous – and delicious – diversity and

once again serving as the foundation of our diet. For fifteen years, John has pursued his dream of growing heirloom grains. This quest evolved alongside an odyssey through athletics, health, nutrition, herbalism, soil science, and ultimately, agriculture,

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Editor's Note

Dear Readers,

Bread is the staff of life, and John DeRosier is a young farmer whose love of grains led him to start With the Grain Farm. His passion for biodynamics shines brightly in this interview by Hunter Francis. It is wonderful to imagine more small-scale grain production like this across the United States. We often hear about market-garden scale vegetable, and even meat production, but not so much about grain. Here on Whidbey Island, where I live in the Puget Sound, we are lucky to have a biodynamic heritage grain farmer, Georgina Silby, whose apprenticeships included time with long-time JPI supporter, Dewane Morgan of Midheaven Farm in Minnesota. Georgina produces red hard spring wheat, and grinds it into flour, as well as purple barley, and kamut. I can testify to the deliciousness of the breads and desserts baked with her fresh-ground flour, as well as the fresh-ground porridge made from her grain mix, which includes cracked purple barley (biodynamicboutique.wordpress.com). I hope that, eventually, more of us will have similar access to locally produced grains – this is an important piece in developing a sustainable local food system. Of course, the cost of purchasing equipment for harvesting, threshing, and grinding is one reason why this practice is not more

widespread. However, this is also an opportunity for cooperative purchasing and cost sharing between farmers, and even consumers.

In the *Agriculture* lectures, Rudolf Steiner states that “great things can be accomplished with enthusiasm.” As awareness of small-scale grain production and enthusiasm for the movement grows, I look forward to watching how John’s With the Grain Farm evolves over the years, and to future updates on the progress of his farming endeavors. I have no doubt that through his efforts, he will nourish people, the earth, and that many will learn and be inspired from all he has to offer.

Also in this issue, Hugh Courtney again answers questions from growers in response to the many emails received by JPI. In each issue, we select two or three responses to publish, with the hope that the answers will be relevant to some of our readers.

Additionally, don’t forget that Associative Contracts are due at the end of March. If you would like more information about signing up for this CSA-style program where, in exchange for an up front financial contribution, you receive benefits of scheduled preparation deliveries, preparation discounts, and free consultations – please call the office at 276-930-2463.

As the winter winds down, and we are all beginning to dream of seed starting, compost pile building, and the first peas and greens of spring, I wish you all the best!

Christy Korrow

Applied Biodynamics

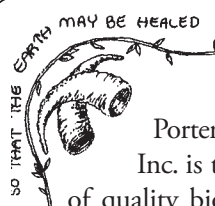
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Mission

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.

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Finding Rhythm and Meaning in Fields of Biodynamic Grain

which he has come to see as our best conduit for understanding our place in the cosmos. He currently farms over 150 acres of certified biodynamic land on four parcels in a wide range of micro-climates. He has grown scores of modern and heirloom varieties of wheat, rye, barley, spelt, corn, oats, buckwheat, millet, quinoa, amaranth, teff, sorghum, flax seeds, sunflower seeds, sesame seeds, split peas, lentils, and garbanzo beans. Ultimately he wants to grow upland, non-flooded rice and is currently assisting in a university initiative to grow out over fifty of these traditional Japanese varieties. John makes nearly all of his own biodynamic preparations and all of his animals are fed entirely from grain and forage that he grows. He has taught numerous public classes on small-scale agriculture and currently leads a community seed preservation effort. He holds a degree in soil science from Cal Poly State University in San Luis Obispo, where he served as production manager for the Cal Poly Organic Farm. He now also manages a 100-acre almond operation and operates his own commercial kitchen where he makes value added products such as flour, granola, rolled oats, and bulgur.

HF: John, I met you at the Cal Poly Organic Farm. Was that your first farming experience?

JD: No, not exactly. I had done some small-scale agriculture using the Grow Biointensive method of John Jeavons and also as a student at Evergreen College up in Olympia, Washington. I went there for a year before going to Cal Poly. They had a small student farm that I worked on. I had done a fair amount of gardening even before I went to college, and I had already discovered and fallen in love with grains.

HF: What would you say originally drew you to plants?

JD: Food, definitely. I had a friend in high school who completely changed my whole world view. She was a real



John DeRosier with amaranth

foodie – interested in farmer's markets, veggies, and cooking. Through her, I found my love for food. She helped me widen my palate. Once I did, I was committed. She opened the door, and I ran through it! We both got into sports together too. It was a personal health thing at that time, as opposed to an environmental commitment or interest in agriculture.

HF: How did you start to garden?

JD: The first step was noticing that there was a difference in the fresh foods I was eating and the realization that food is not all the same – that one carrot doesn't equal another carrot. Prior to that, I hadn't really made the connection. I grew up on a standard American diet, and here in California, foods in the grocery store don't change much throughout the year, so seasonality didn't mean that much to me. My sense of place in the universe was just waiting to explode and it did through food. Food became my connection to the land around me. Food choices also made me more aware of my body. At the time, I was getting into sports and yoga. I began to connect quality food with a feeling in my body. That was a profound eye opener for me. I began to notice differences in my body – not just physically, but psychologically and spiritually. My thoughts and emotions began to change. As soon as I started putting my hands in

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*)

the soil, connections between all of it started to make sense, and I began to realize agriculture was crucial. It became the center of a big wheel that started spinning for me. Through food and the land, I began to feel a deeper connection to the environment and its rhythms. All of the sudden, I appreciated context and the fact that everything grows out of the earth and the cosmos. Since, I have come to see that what we call agriculture is where humans meet the world and is also a major way the world influences humans. Not the only way, but one that is enormously influential in the dance between humans and the environment.

HF: *You said you had studied with John Jeavons prior to college. Was that an important part of the process?*

JD: Oh, yes! I took time off after high school and spent over a year biking all over Western Europe. When I came back, I became more and more drawn to agriculture, and this ultimately led me to the work of John Jeavons, who is here in California too. I did nearly all the courses he was offering at the time – all the weekend and weeklong intensives. Multiple times! I was really taken by his sense of efficiency and quality; I resonated with the intention around it. The experience became a foundation in my agricultural formation. I began to see that the industrial model of agriculture we are in today misses what has become a fundamental aspect for me – that agriculture is a playground for personal transformation. It is about our interaction with the earth, which is our ultimate teacher and guide. To me, the earth is the source of enormous energy and guidance, and agriculture is a profound mentor. If you get a little off balance, the earth says, “No, you can’t go that way; you need to bring it back this way.” It is as



John DeRosier teaching a biodynamic soils class at Rudolf Steiner College in Sacramento

if the earth sets up checks and balances of all sorts, and when you work within that structure, you have freedom. You have choice. One has a sense of exploration and experimentation. However, if we don’t work within nature’s system, then not only do we begin to expend a lot of extra energy unnecessarily, we begin to break down nature itself. I saw that Jeavons’ work was trying to harness the natural rhythms of nature to become as efficient as possible. By participating with nature, and by working efficiently with your own body, you don’t have to rely as much on all the massive machinery used in modern farming.

HF: *How did your experience at the university and on the organic farm add to this?*

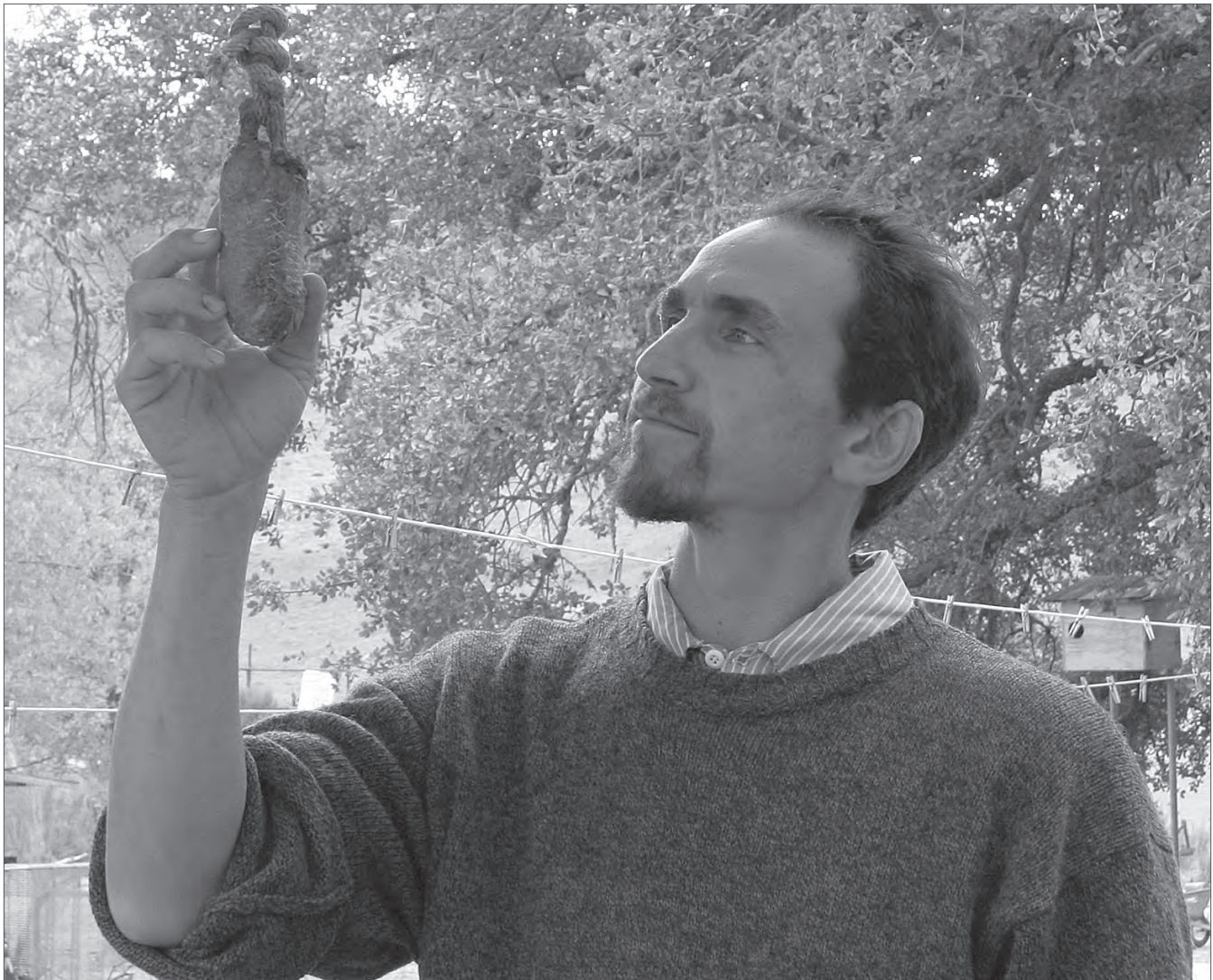
JD: When I got to Cal Poly, I was very surprised at how much I enjoyed my time there. Up to that point, I had struggled a lot with my studies. I was burned out with academics, but studying soil science renewed my interest. And yet, much of it was conventionally focused. That part left me feeling unsatisfied. But, looking back on it, I got a good conventional agricultural education, which has been useful for communicating. Most people in agriculture speak that language, so it has been helpful. What brought the whole experience alive for me was the experience at the organic farm. It was as if the farm was waiting for me. I started my own plot there, and I was on fire about it. When I ultimately became a manager, I got to experience a production model for the first time. It put another face on agriculture for me, and it helped me to see the role of science and the benefits of the conventional model. We went through rapid expansion at that time, going from a sixty-member CSA to 180 members in a short period. It definitely tested the system, and I learned the value of organization in the production mold.

HF: *When was your first exposure to the work of Rudolf Steiner in all of this?*

JD: That was much earlier, right when I got back from Europe in 1996. I was already reading Viktor Schauberger and Theodor Schwenk. I was really interested in water. At the time, I think water took me on even more of an adventure than my interest in soils did. I was fascinated by its significance. I still am.

HF: *How did you react to Steiner’s writings?*

JD: I hadn’t really thought about spirituality in terms of agriculture and land use until I got to Steiner. He made that connection for me – that you can work with the earth and the land as a living being in the same way you can work with your body. That was pretty revolutionary for me. So, Steiner sent me off on a new tangent. I took as much as I could from the *Agriculture* book, and I started making my own preparations.



BD #502, stag bladder stuffed with yarrow

HF: *On your own?*

JD: Oh, yes. The only preparation I haven't made so far is the oak bark. I don't know why it keeps eluding me. I've made all the others. Right now I have BD #500, BD #501, yarrow, and stag bladder going. I make valerian all the time. I like making the nettle preparation; it's super easy! I love nettles! You know, before I got to biodynamics, I had already worked with herbs. I lived with an herbalist for a few years; he was teaching a class in town on Native American herbalism. We used to go out and collect plants. I really resonated with native plants and herbs, and I found some major allies in the plant world, especially yarrow and nettles. They got into my blood. And my favorite teas became dandelion and chamomile. Those were the only two teas I ever drank. So when I started reading Steiner, I thought, "Wow! These are the four key plants I resonate with!" It was amazing. Even when I was younger and cycling, I had

become infatuated with herbal creams. We used to rub them on our legs, and I became intent on making my own. Before I could even conceive of their importance mentally, I intuitively gravitated towards herbs and plants. I was so moved by the influence of plants and what they would do. You would rub these things on your body and they would have an effect! By the time I got to biodynamics, I had already studied a lot about herbs, and I had been making tinctures with them. There was a strong foundation there. Making the biodynamic preparations made total sense.

HF: *Eventually, you started farming your own land?*

JD: At Cal Poly, it became clear to me that I really wanted to do more than I could do there. I was passionate about agriculture, and I had already had a lot of experience with grains. They were really speaking to me. I couldn't handle not having them around me. I have planted grains every year since 1997. I was also really drawn to the whole farm



Feeding the angora goats

model – having all the elements present. I’m very connected to my animals, and I love the hay and the grain. The focus on vegetables at the organic farm seemed to be missing something to me. I think they are great, and I can see why people grow them, but I don’t have the same affinity for them as I do for grains. There is something about the rhythm of growing grains. Cultivating them sets up a deep rhythm that nature enjoys. I found that the vegetables were just so “busy.” To me, the grains and the hay and the animals set up the rhythmic foundation for the farm.

HF: *So you started With the Grain Farm in Paso Robles?*

JD: Yes, I became a ranch manager, and the owner let me farm a parcel of land on the side. Immediately, I was ripping things up. Planting grains! At last, I could do what I wanted to do. It felt so great. That was seven years ago.

HF: *Since then you have added sites. How would you characterize your farm now?*

JD: Well, I was up to a couple hundred acres. Now, I’m back to about 150 on four parcels. Mostly grains, plus a lot of hay, cover crop, and legumes. It’s all about the rotation really. I have a vegetable garden and animals on my home site. I move my animals through my blocks with electric netting. Animals are the other side of grain. Shortly after we

domesticated grain, we domesticated animals. It’s a perfect match! We gather the seeds, animals eat what we don’t (straw, stubble, etc.), leaving the field cleaned and manured. The combination is so elegant and beautiful; I’m speechless. The plants want to grow; the animals want to eat; I just work to provide for the farm the right organization, and the elements work together because they want to naturally.

HF: *All varieties of grain?*

JD: Oh, yeah. I grow everything I can get my hands on. I grow at least some of every grain, even ones most people here have never heard of.

HF: *What would you say about your connection with the ancient grains?*

JD: There is something deep in me that likes to explore new things. But I have a practical side to me that loves to show people how much you can do with grains. We often think about all the varieties of a given vegetable, but grains are just as diverse – more so, actually. And, we often think of grain farms as multi-thousand acre operations, but that’s not the way grains have been grown traditionally. It is still a very small-scale operation in many places. If people have ten square feet of land, they plant grain. They don’t plant lettuce. That’s because grains are the backbone. It’s how



Sorting oats with a gravity table

they store their calories. It's how they can get the nutrition they need. That's really the history of grains: people relying on these plants for their very survival. So, I think small-scale agriculture is ideally suited for grains. You can grow a quarter acre of a grain and get all the grain you want for the year. If you grow a couple of acres, you can have all the grain you need for yourself and a few other people.

HF: *How much land do you think one needs to feed oneself, with grains as the base?*

JD: If you are very careful and plant intensively, you can easily get a thousand pounds of grain on a quarter acre. A thousand pounds! You know, that's three pounds a day. That's a lot of grain – and that's only one crop. You could do two or more with irrigation or summer rain. So with five acres, you get a lot, and you can then incorporate animals into the system. I love having the animals around. As for the grains and seeds, I like their productivity. I was just thinking about it today as I was packing sacks of almonds and pitching them. It's very repetitive, but that's the part of agriculture I like. It's not the same as picking tomatoes. The feeling of harvesting grain is in my blood. I love the feeling of taking quantities of grain and winnowing. It is ecstasy – to gather material that is spread all over, to bring it

all together, to make piles, to organize it, to stack it, and to end up with bundles and bins, and then to clean it. When the final product is in my hand, wow! It is a lot of food, and it feels like abundance to me. It feels like the earth and the universe are really working with you, like you are doing your part to harness vast energies that produce so much that people love and need.

HF: *I understand you market many of your grains through a CSA. How did that come about?*

JD: That happened about three years ago because I had a lot of grain floating around – wheats, barley, corn, millet, etc. But I couldn't do anything with it, because I didn't have a commercial kitchen at the time. I couldn't even make flour. There was also the hurdle of a lack of cleaning equipment. I wasn't selling much of the product, so I wasn't manifesting my dream. Now, I have a twenty-four-week CSA with about thirty-five members in it.

HF: *And now you have a commercial kitchen?*

JD: Yes. I ended up buying a facility. You can't do anything without a kitchen. No cracking of any kind, no milling, no rolling, no flour. I'd like to do more processed products like pasta and couscous, and I'm seriously considering getting into bread. The kitchen has been a big learning experience.



Khorasan wheat, named after an historic Persian province

It kicked me into more of an economic model. I didn't go into it with much money, personally, which started me down the track of becoming a real business person. I love looking at spreadsheets and thinking about my energy. It's almost as if I am looking at the aura of my farm, like the vitals, or a read-out of my life. Everything starts out as this vast quantity of energy, which comes into form. We work with that energy, and we guide it. If things are going well, I can see I am building resources. When that happens, I have done something that worked in the flow of nature. If you are working with nature successfully on a farm, you are getting much more back than you put in. Since my business is so small, I can track all the things that I did personally. I can see the interaction of my life with the earth, and I've fallen in love with watching it. I feel like it is a very big part of farming. It is the balancing of the analytical and the decision-making aspect of the brain and the guiding, intuitive mind. It is a blending of mind and spirit. All this doesn't mean I'm content with the overall economic structure we are in. There are major policies in place that are squashing the capacities that people could otherwise develop. Subsidies are the worst. People tout capitalism, but we don't live in a truly capitalistic society. If we really let market forces work, and if everyone had a fair playing field, that would be a good model. But when industrial giants are funded by our tax dollars, that's an unfair advantage. And yet, their farming strategies aren't really working in terms of nature. You would see that on their balance sheets if they weren't subsidized. Five companies now own most of the world's grain supply. The price of grain is the same it has been for 150 years. It just doesn't make sense. We need to be more closely connected to the energy we put into the system so we can guide it better.

HF: *What are your biggest practical challenges as a farmer?*

JD: My biggest challenge currently is a lack of fencing. Deer are so hard on summer crops here because it is so hot and dry. In certain cases, they have decimated an entire crop. Plus, I am farming on several different locations, which are quite spread out. So, I am learning to work with different systems. Each place is unique. Our county has a very wide range of climates and soils, so I am getting to see farming from many perspectives. To go from place to place is difficult, but it has been miraculous. At times, I can almost feel the variations Steiner talks about in my own body. In the same day, I can work two totally different types of soil, and as I am tilling the land, I can feel very subtle differences of how each soil responds to the plow. I've come to develop an intuitive appreciation for the various soil types, something that I might not have gotten if I didn't have to work in such varied circumstances.

HF: *How many animals do you have?*

JD: Almost twenty ruminants (sheep, goats, and a cow) and a small flock of twenty chickens. I raise all the feed for my animals, which is fantastic. I'm working very hard to grow my herd to be more effective with the amount of land I'm working with.

HF: *What has your preparation making experience been like?*

JD: They work! If you are tuned in at all, you know they work. You can notice the difference – specifically, with the BD #500 and the barrel compost (a.k.a. Biodynamic Compound Preparation). I do a lot of transplanting of my grain because I do a lot of research with my grains. I might start with just a few seeds, and I'll grow them out. So, I do a lot of handling. Since I was a teenager, every year, I have grown out grains by hand. I tell you, with the preparations on them, the root structure in particular jumps out. The root mass is really well developed. It definitely takes on an integrity and a strength.

HF: *You are using the preparations on the seedlings?*

JD: Yes, on the greenhouse starts and on the beds in the ground. And the barrel compost! I love the barrel compost. It is so fun and easy to make. I use Maria Thun's basic recipe. It is amazing stuff.

HF: *How much rain do you get?*

JD: We average seven inches annually. It's so different here. I haven't found any good books on dryland farming in the western U.S. – biodynamic or otherwise. The rhythms are different and so is our fertility cycle. Because we have a dry summer, all of the organisms go to sleep for a while. Not much takes place until it starts raining again. That sets up a different dynamic of when to do things. I don't even put preparations out any more in June, July, or August. It doesn't make sense to me. I'll do nettles with my irrigated crops, like vegetables, or if I'm doing summer grains. Otherwise, it just doesn't feel appropriate.

HF: *What kind of sprayers do you use?*

JD: I have a few different kinds. They are all things I've rebuilt. I have a little back-pack sprayer that I use a lot, and then I have a tow-behind sprayer I can tow with my ATV. Then, I have a bigger one that I can mount on the back of a tractor. I've tried different kinds of applications, but I like putting on the preparations before I disc or cultivate the soil. That's my favorite way to put the BD #500 and the barrel compost out.

HF: *How do you feel about stirring?*

JD: I think doing it by hand is the most potent. I used to do it all by hand, but a couple years ago, I got a flowform and I really like that. I bought it from Australia. It's made out of fiberglass, so I can move it around easily. Also, I built a small flowform with two tiers that's good for a five-gallon bucket.

HF: *Is there anything else you can say about your work with the preparations?*

JD: I love making the preparations with my own cow manure. It's so fun. As I said at the beginning, it's all about the transformation of the self through working with the environment. I mean, that's what we're here for, right? We are on the planet; we're evolving, and while we do it, we're evolving the earth. Any time you can add your own personal touch, your attention, it just magnifies the process. It's like anything. If you are managing millions of things, how effective can you be? But if you are doing things personally, you can be very involved and give a lot of your own energy. That's powerful. Then again, I've had some bad experiences. A few times I have put out the BD #501 and fried my plants – once in February and once in October. It's such a dilute amount of silica. That really showed me the full potential of the preps. They can be overpowering. I'm still learning. Also, I use nettles all the time. Especially on crops I can get into easily. I either make a tea out of dried nettles, or I'll put a little bit of the nettle preparation in my backpack sprayer.

HF: *What effect do you feel the nettles carry?*

JD: It's amazing! They are super mineralizing. I feel like the nettles do the same thing for the plants that they do for my body. I drink a ton of nettle tea. It gives me strength and vibrancy. Maybe it's their iron forces. I have heard nettles are the only plant that has all of the amino acids in it.

HF: *You have been a farmer, a teacher and a businessman. What is your prognosis of where we are headed as a society?*

JD: My overall sense is that we have a serious crisis going on because we don't know how to get people onto the land in a way that enables them to stay there. That's my biggest concern. We have a lot of inspired young people, but the economic and political climate is so brutal. It takes very special situations to succeed, and it's not enough to rely



Cleaning wheat

on unique situations. It's just not enough. We need a flood of people going back to the land, and I'm not sure how we're going to do that. Not just thousands, I mean we need millions of people to be reconnected to the land. Yet, we don't have the right cultural climate to support a mass migration onto the land. And we won't until we have the right financial incentives. At the end of the day, it has to balance financially. If you are pouring money and energy in, but not getting money out, it means you have to get that money and energy from somewhere else, like from another job. That takes your attention away from farming. It's not sustainable. Nonetheless, I'm an optimist. I am hopeful because I think people are waking up. There is a growing core of people who get it. The younger generation is so much more receptive to new ideas. They have more of an inherent appreciation for things like biodynamics.

HF: *I've tasted your grains and I have to say, they are a world apart from what we usually get today. You're on to something special, John. Don't let go of it!*

Anecdotes and Antidotes – Biodynamics at Work

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

Spraying new raised beds and sprayer recommendations

Q: *Do you recommend spraying the farm or garden when you are not growing anything? I am just starting a farm/crop garden, and I am double digging several 5 × 20 foot planting beds. If I purchase 1 unit of Pfeiffer BD Field and Garden Spray for an acre, how much would I spray on one of the 100-square foot planting beds? Does this also help the soil when weeds are growing on the land? What do you recommend for a sprayer as I am on "foot" and don't have a tractor? I am on about two acres of land.*

A: Yes, spray even if not yet growing a crop. It is about changing the energy of the soil. While you can just spray the beds, it is helpful to also spray the land around the beds. However, if you want to confine the spray just to the beds, then you could take as little as ¼ teaspoon per bed. Activate it, add more water, stir briefly, and spray it out over the bed, rake it in, spray again and rake, and spray a third time and rake it in. I would not recommend any lesser amount per bed, even though, when applied to an acre, the amount would cover far more than a 100 square feet (or with 3 x spraying 300 square feet). You are trying to create a force or energy field, and it needs a certain amount to create a minimum force field. I assume that you will intend to create more than one bed, so the future beds could get the same treatment, and at the completion of your beds, the remainder of the Pfeiffer BD Field & Garden Spray could be applied to the entire general area of the garden, including paths, etc., or used to apply to the beds for plant health on the crops, or when turning in a green manure crop. The more frequently the soil is treated biodynamically, the sooner will it transform. As to weeds, the biodynamic sprays will help all plants, but because they will change the soil chemistry, you may end up with a different weed population. I would treat the weeds as though they were a green manure crop, or as ingredients for a biodynamic compost pile.

Any good sprayer from your local landscape and garden dealer would be fine. You could also check out the "Berthoud" backpack sprayer from Indiana Berry Company, or the sprayer selection from A. M. Leonard in Piqua, Ohio (on the internet). In the long run, you will likely be better to get a backpack sprayer (4–5 gallons) rather than a 1- or 2-gallon shoulder sling sprayer that you constantly have to put down to pump up the pressure.

Shipment and storage of preparations

Q: *I sent my order for preparations in thinking that I would not receive it until spring, as I thought the preparations could only be dug up at a certain time. I have received my*

preparations in January and don't need them until April or May. It's essential that I store them properly. Since the instructions for storage say not to let the preparations dry out, and they are stored in containers that allow them to breathe, I am assuming that at some point water needs to be added to them while still in storage? Is this correct? What kind of water?

A: Since we are dealing with upwards of 2,500–3,000 shipments per year, in every month of the year, and throughout the world in some cases, digging the preparations up just prior to each shipment would not be a particularly efficient way for us to do it. Please note that our Associative Contract asks the client to specify shipping dates, not only for spring and fall, but for any other time of the year. We may have assumed you were dealing with a greenhouse situation as is the case for many of those ordering at this time of the year.

The best water to use to maintain moisture is filtered rain water, then well or spring water. If treated water is all you have, let it sit out in the sunshine for at least twenty-four hours before using on preparations. It takes a long time for the preparations to lose moisture below 30%. It would also be best to transfer them to glass jars. A simple way to store your preparations is to obtain a bale of peat moss, use a larger size bulb planter to cut holes in the bale, extract the peat moss sufficiently to insert preparation storage jar (each in separate hole), place the peat moss you have extracted in a sock, and use the peat moss filled sock as a lid over the jar. For small quantities, jelly jars or baby food jars work nicely.

We store preparations in glazed 15-gallon clay crocks, surrounded by 3 inches of peat moss in a wooden box, all in a root cellar. We ship the preparations from storage, rather than planning to dig them up just prior to shipping.

Making compost in a rolling composter

Q: *I am developing the soil (very sandy – it used to be the beach in San Francisco) in my backyard to grow vegetables for the family. Our garden is small – maybe 150 square feet. I have an insulated, double chamber, rolling composter to handle kitchen scraps and bunny poo and bedding. With turning, I can make the compost in six weeks. Can I add some compost preparations to this? There's no room in my yard for an open compost pile.*

I have perhaps 200 square feet of veggies in my backyard garden here in San Francisco. I am ordering the inoculate for my rolling composter, and I also want some BD #500 and BD #501 to spray. What product should I order? Can I mix up a small amount and save the rest? If so how should I store it? How long will it last?

A: For your compost making, order one unit of the Pfeiffer BD Compost Starter. Use approximately 1 teaspoon with each

filling of the composter. When you have the chamber about $\frac{1}{4}$ filled, take a teaspoon or so (dry measure), activate it in a small amount of water, then, after 12 hours or so of activation time, increase the amount of water (to a total of one pint to as much as one quart – depending on moisture level in the chamber), add it to the chamber, and continue to use the composter in the regular way. Once moistened, use within 48 hours. The dried unit will last for a long time and will keep for not less than nine months as long as it is not moistened. If you care to try this approach, we would appreciate hearing from you as to what success you might have.

It is probable that composting time could decrease substantially. When the Pfeiffer BD Compost Starter was used in the 1950s to compost Oakland, California city garbage, they achieved finished compost in as little as twenty-one days. It

is possible that, with the churning motion obtained in the chamber of the composter, you could see similar results. Unfortunately for the Oakland project, the plant was burned to the ground. The story is that arson was involved and somehow so was the Mafia, and the owner of the plant along with Ehrenfried Pfeiffer were discouraged from rebuilding the plant. Makes for an interesting story, but definitely hard to substantiate more than fifty years after the event.

A single unit of the BD #500 needs to be used within three weeks after receipt, otherwise store as indicated in our storage instructions. The single unit of the BD #501 can be stored in a glass jar in a sunny window. Subdividing the units of the BD #500 and #501 is somewhat more problematic because of the small quantity of substance involved and the storage requirements for the BD #500.

New JPI Board Member, Pat Frazier

Pat Frazier has lived in Colorado all her adult life, moving there to attend the University of Colorado at age eighteen. She lived in Boulder, Colorado for over 30 years, where she practiced in-patient and primary care pediatric nursing as a pediatric nurse practitioner.

Along the path, Pat attended western herbalist training, became a permaculture designer and instructor, and was introduced to biodynamics by her long time friend and teacher, Jim Barausky. She studied with Jim for a six-month intensive when Jim was the manager of Hedgerow Farm in Boulder. “Jim ignited my passion for biodynamics in the early ‘90s, and under Hugh Courtney’s tutelage at JPI, preparation making and biodynamic farming practices have developed into a life path.”

She moved to the western slope of Colorado eight years ago, just outside of Hotchkiss on Redlands Mesa. Her home, Peace and Plenty Farm, which she shares with her husband, Paul, a musician and music educator, is an off-grid, permaculture-designed, homestead-scale operation, managed biodynamically for a decade. Pat raises chickens, goats, a dairy cow, medicinal and culinary herbs, fruits, and vegetables. The farm is a demonstration site for high desert permaculture design and biodynamic preparation making. Pat offers workshops and classes on biodynamics throughout the year, and an annual residential Permaculture Design Certification in the summer through University Centers of the San Miguel in Telluride. She is active in her local community, promoting sustainable agriculture, organizing conferences, workshops, and lectures.

She has been a participant of the Fellowship of Preparation Makers, organizing the past three annual conferences as a member of the conference planning committee, and

hosting the 11th annual Fellowship conference in her tiny western slope community last year.

She is a mother of two grown children, grandma to seven-year-old Jackson, and expecting Spencer, her second grandchild in January. As a grandma, she is influential in the local Waldorf-inspired Blossom Valley Cooperative, bringing her expertise in biodynamics and childhood development to Waldorf education.

As a board member of JPI, Pat represents the Rocky Mountain Region of the US as a bright light of the biodynamic movement and regenerative agriculture practices. Pat will continue to deepen her knowledge and love of the preparations by supporting the work of JPI. “I am deeply honored to become a part of JPI and its future.”

Save the Date!

February 28–March 3, 2013: Twelfth Annual Fellowship of Preparation Makers Conference in Fall Creek, Oregon

The theme will be preparations BD #502 and BD #507. Contact Andhi Reyna at 541-942-5424 or at branchroadfarm@gmail.com.

Visit www.jpibiodynamics.org for

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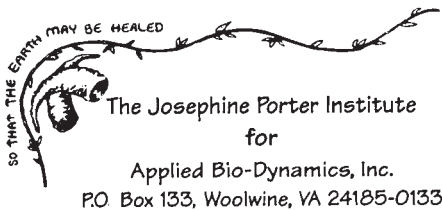
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Sign up for the JPI e-News!

“In the seed we have an image of the whole universe. Each single time a seed is formed, the earthly organizing process is led to its end, to the point of chaos. And each time, within the seed-chaos, a new organism is built up out of the whole universe.”

Rudolf Steiner – *Spiritual Foundations for the Renewal of Agriculture*, p. 35



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