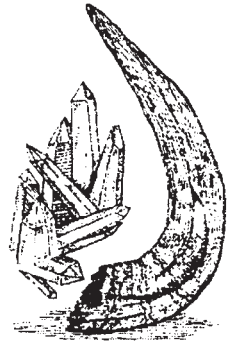




Applied BIODYNAMICS®



Fall/Winter 2016

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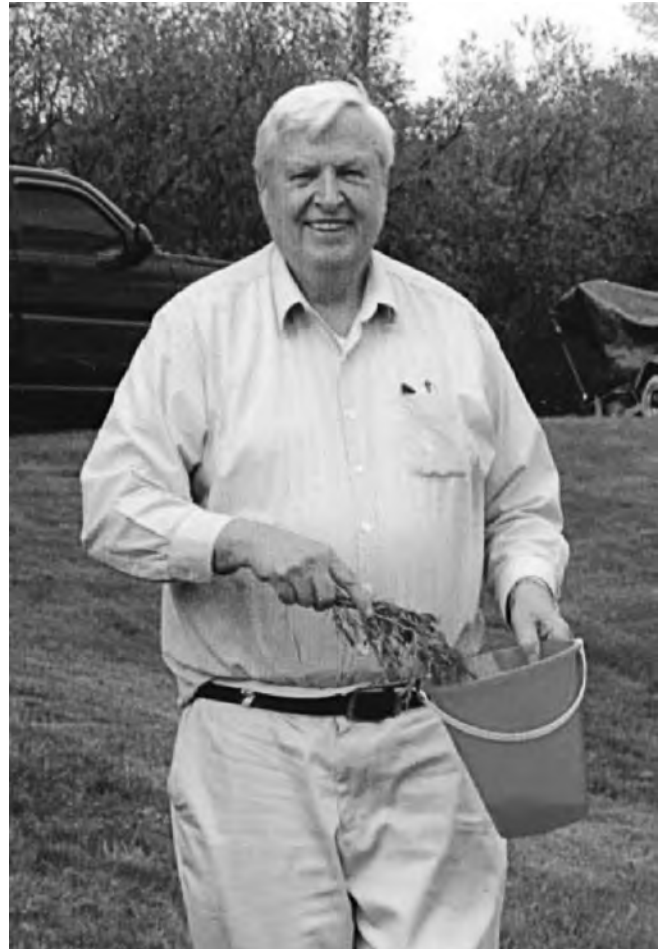
Issue No. 88

Reconnecting with the Forces of Nature: Festivals and Healing Substances Abigail Porter Interviews Basil Williams, DO

Festivals and rituals honoring nature and the forces behind nature have a long history dating back to ancient times. The rhythms and cycles of the earth and the cosmos were at one time an intimate part of our ancestors' lives. They could see, feel and communicate with the forces and beings that create life on earth and in the cosmos. Before we lost this relationship with the interconnected processes and beings that create and sustain life, offerings were made to gods and goddesses and the forces in nature to insure future survival and in gratitude for their life-sustaining role. Across all cultures the transition of the seasons, the equinoxes and solstices played a major role in the annual festivities. As humanity evolved, each culture overlaid its own rituals on previous festivals.

Since the industrial revolution, the disconnection with nature has increased, resulting in the desecration of our mother earth. Soils are dead, the oceans are suffering, and water and air is polluted. The Fukushima nuclear disaster continues to harm the earth and living beings. Forces destructive to life have weakened the life giving forces and elementals referred to by spiritual science and have made many parts of the earth uninhabitable for them. With the advent of Christ Consciousness, and the evolution to consciousness soul, there is a renewed effort to connect to nature, the nature spirits and the elementals and to honor them and nourish them with our attention and offerings.

Twenty years ago, Dr. Basil Williams and his wife Christiana were called to acknowledge, honor and nourish the life processes and elemental beings that are responsible for life on earth in festival celebrations with members of their community. During the festivals of St. John, Michaelmas, Christmas, Epiphany, Easter and Whitsun, the elemental beings are honored along with the spiritual significance of the various days or seasons. Initially, gratitude was expressed with music, singing, poetry and



Dr. Basil Williams

verses. Then, Dr. Williams added the biodynamic preparations that he had already been using in his garden; the horn manure (BD #500) to support the growth processes associated with earth and water, and horn silica (BD #501) to benefit

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From the Editor

Dear Friends of JPI,

Our fall/winter newsletter comes with holiday greetings from JPI to all of our readers. In it, you will find some excellent reading that helps to deepen our understanding of the forces and beings that come into play during this special time. Dr. Basil William's long-standing work in nurturing the elemental world is featured in two articles compiled by Abigail Porter, and in them a compelling reminder of the incredible debt we owe to the many beings that help make life on our planet possible. Karen Davis-Brown similarly does a remarkable job in illuminating the energies and rhythms at work during the winter months. I think you will find the insights they provide to be fascinating. A special thank you also goes to Mac Mead for sharing his experience with seed burial during winter months as a way of capturing winter's uniquely enlivening underground activity. I would also like to personally thank Jamie Fochuk for sharing his story with me about the vibrant farm he has created out of virgin earth in British Columbia.

We hope this issue will bring light and warmth – as well as some ideas for your farms, gardens, 2016 workshop schedule, and perhaps a gift giving idea or two!

All our best wishes for joyful season and a fantastic New Year,
Hunter Francis

Applied Biodynamics

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Three Kings Preparations Kit

Contains gold D2, frankincense and myrrh and small vials of vegetable glycerin and rainwater. Kit is available for \$37.00. Order before December 20 to insure delivery by December 31. Contact www.jpibiodynamics.org/product/three-kings-preparation.

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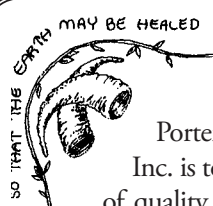
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Mission

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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Reconnecting with the Forces of Nature: Festivals and Healing Substances

the air, warmth and reproductive processes. His experience using homeopathic remedies and herbs to treat patients in his anthroposophic medical practice led him to apply those healing substances to earth. Following the concept, in a quote from Paracelsus, "The human being is a microcosm within the macrocosm," Dr. Williams decided to use "potentized healing substances and herbs with the macrocosm of the earth."³ Specific substances were chosen for each of the seasons and festivals, both as symbols and to nourish the elemental beings and the life giving processes they provide.

AP: What is your background, Dr. Williams, and how did that lead you creating the festival sprays?

BW: I grew up in Michigan with four brothers on a forty-acre farm with cows, horses and chickens, and I hand-milked cows twice a day for three years while in junior high school. We had a truck farm, baled hay and grew most of our food using a lot of compost since we could not afford to buy fertilizers. We drank raw milk and my mother made bread, butter and cottage cheese. It was a great life, very healthy, and the life forces from the food stayed with us throughout our life. I don't think I could have done as much as I have done in this lifetime if I didn't have that kind of healthy foundation with strong life forces. I have always remained interested in farming and when I went to college, I still farmed every summer. When I went into medical school, I was too busy but after graduation I began my gardens again and have been gardening organically and then biodynamically for the last fifty years or so.

AP: How did you find out about the biodynamic method?

BW: I started very slowly with Anthroposophy when my

wife started the Waldorf training program in Detroit in the early 1970s. At the time, I was Assistant Professor of Medicine at Wayne State University, School of Medicine. I had specialized in internal medicine with the sub-speciality of infectious disease and was doing original research on Herpes Virus Encephalitis. I was very much into Francis Bacon's Scientific Method (the "father of materialistic science") but I began to find the physical scientific medicine lacking in the explanations of many phenomena in the life of the human being. So, I began seeking a new philosophy concerning the origin and health of the human being. Over the years, I began a quest into spiritual scientific medicine. At the Waldorf Institute, I found an understanding of Cosmic Christianity through anthroposophy and since I had grown up on a farm, it was natural for me to apply biodynamic spiritual methods to my gardening and farming. But it did take me while, being trained as a Bacon scientist, to switch over from thinking only with the senses to also begin imagining and experiencing the world of the spirit. It was a big change coming from the materialistic science point of view. It was through Werner Glass, who was a great help tutoring me and shepherding me in basic anthroposophy. I then found my way to biodynamics and anthroposophic medicine. At the time, we lived in Canton between the active anthroposophic and biodynamic communities in Ann Arbor and Southfield, Michigan, and I began learning more about anthroposophy and biodynamics as well as Waldorf education. At the time, I practiced mainly in the hospital but I did find some time to practice with some private anthroposophic patients.

In 1987, I decided to leave the Detroit area and went to Europe to further my understanding of anthroposophic medicine by studying in different anthroposophic clinics there. After returning from Europe, I practiced anthroposophic medicine in the Harlemville, New York area. In 1993, I had the opportunity to take a position as professor of medicine (of infectious disease) at Midwestern University which required covering two hospitals in the Chicago area as well as teaching medical students. Although I enjoyed the busy lifestyle, I found after fourteen months that I couldn't really do my anthroposophic work to my satisfaction. I quickly learned that it was very difficult to mix regular hospital medicine and teaching medical students with anthroposophic medicine. I was so busy with the regular medical practice and teaching that I couldn't really find time for serious anthroposophic work. So after fourteen months, I decided to return to the East Coast and began an anthroposophic medical practice in Arlington, near Boston, Massachusetts. I practiced there for fourteen

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*)

years and also worked part-time with the Veterans Administration Hospital as an internist. During those years, my wife and I were very active with anthroposophic activities in study groups and with the Anthroposophic Society. We celebrated the festivals in community and I also was active as a biodynamic gardener.

AP: *What inspired you to develop the festival sprays and when did you create them?*

BW: Even when I was in Detroit back in the early 1970s, I left an area on my property for the elemental beings. I always had a feeling towards them. I had read and had been influenced by Marjorie Spock's book *Fairy World and Workers* and Rudolf Steiner's *Nature Spirits*. Then, my feeling life was really affected when I read *Karlik*. It was written by a blind woman, Usala Burkhard, who had a relationship with "Karlik," an elemental being, probably a very advanced elemental being. I would like to read what he told to her. *"If humans could only join us in such a way that their activities would harmonize with our work... their work is still not in tune with what is taking place in the other Kingdoms... They (elemental beings) haven't received anything from them (humans). This is the same as it is for you (humans) to starve. They receive no more warm thoughts, no more prayers to nature."* This really pulled at our heartstrings; my wife and I decided to really honor the elemental beings in community with the festivals of the year. I really took it on. I said to myself, this we have to do. We felt that as modern people, we should begin to work

to include the biodynamic preparations that I was already using in my garden. The first preparation I used was BD #500 (horn manure) to help the gnomes (earth/mineral processes) and undines (watery influences) as spiritual forces. The BD #501 (horn silica) was added to some of the festivals to stimulate the relationship with the sylphs (air) and fire spirits (warmth). For many years, I had practiced anthroposophic medicine using healing substances for the illnesses in my patients and I felt the good earth and the elemental world needed these substances as well. When we do not recognize and appreciate nature and the spiritual beings that are part of creation, then that is an illness as well. I decided to work with homeopathic and anthroposophic medicines that I use in my practice like gold, silver, silica, calcium carbonicum and so on, as healing substances for the earth and as spiritual symbols that relate to the elemental beings. They become very powerful, archetypal symbols when they are potentized and spiritualized as a homeopathic remedy. The substances are potentized by first grinding them together with a mortar and pestle and then stirring them in water for an hour. The container is passed around the circle, from one person to the next, young and old, with each member contributing his or her individual spiritual thinking, heartfelt feeling and purposeful willing to the preparations as they are being ground and stirred. The forces of healing are then enhanced by the group as a whole. The elemental spiritual beings want to be recognized and appreciated by all of human-

"...in the minute entities, in the minute quantities, the radiant forces we need in the organic world are really set free – provided only that we use these entities in the proper way."

Rudolf Steiner, Agriculture Course, p.90 (Adams translation)

spiritually with the Elemental Beings by recognizing and appreciating them for the gifts of life that they bring to the earth and to human beings. Elemental beings are very close to us as spiritual beings. In the time of spirit soul or consciousness soul, we should begin to work actively with them.

We started in 1996 celebrating all the festivals with the elementals in mind, in community with other anthroposophists and the Waldorf School in Lexington. It was a wonderful time because it inspired me to write a booklet with all the festivals and all the substances involved. We played music and sang songs, and recited poetry and verses for each festival. Later, I decided to work on not only actively thinking about the elementals and the festivals; I started

kind and each individual's contribution is necessary for the healing of the earth. Steiner was once asked, "What is a healing substance?" His answer was, "it is a substance that has been humanized." When he was asked, what is life?" he answered, "you must study rhythm. Rhythm carries life." People enjoy working together with the festivals and they feel they are doing something positive for the good earth. Working spiritually with the elemental beings and the other spiritual beings of nature is also health giving. When one sits in his or her healthy, vibrant and happy garden (free of pesticides and other chemicals), then one can derive its health giving forces both physically and mentally.

AP: *So the festival celebrations and sprays were intended to be a community event, from the collecting of materials, to making*



Stirring at Australian Festival

and grinding the preparations and then spraying them out. It seems that a lot of planning would be needed to gather all of the materials. Why did you choose the specific substances and what symbolic value do they bring to the ritual?

BW: Gold is major because we are looking for the forces of gold. It can sometimes be hard to obtain. I use 22kt gold leaf and sometimes I use the potentized D10 of Aurem as well. The gold relates to the forces of the sun and the forces of the Christ. It was Paracelsus who once said that the forces of the sun, gold and the heart are the same force. And Steiner frequently quoted him on that. Gold has a special quality of wisdom from the Three Kings substances and is associated with Melchior and with light and the Christ. The sun also represents how the Incas, for example, had a relationship to the sun as the creator of life. Without the sun we wouldn't have sufficient life forces for the earth. The Incas worshiped the sun and used gold as a representative of the sun; gold was really a spiritual representation of the sun. And with frankincense and myrrh, the tree resins, those three substances together I use for Epiphany and as well as in other festivals. This is especially true where a new place may require very powerful forces for healing. Because of the harmful changes in the world we have today, I have used them more and more with each festival. This is

a personal intuition, but it could be different for who ever celebrates each festival. It is not a hard-fast rule.

AP: *I have been under the impression that the Three Kings preparations should not be used until after the elementals have been nourished by all the other biodynamic preparations first.*

BW: Hugo Erbe (1895–1965) was a noted biodynamic farmer who first sprayed the Three Kings preparation on his land around August 1945 after the atomic bombs were dropped on Hiroshima and Nagasaki. He developed the spray because he noticed the elemental beings had left his land after the earth was exposed to atomic radiation. Through intuition, he used gold, frankincense and myrrh to help heal his land and to encourage the return of the elemental beings. After he sprayed with these substances, they did return to his land. In my experience, I have found this also to be true in situations where these healing forces from these substances are needed. What substances one may choose will also depend upon what one feels within one's heart and what the land and the elemental beings may need during a particular festival. Different substances on one's property may have special meaning for each individual celebrating the festivals; for example, you may have a relationship with a certain flower, which you could put into the preparation for that particular time. The

flowers and the plants change through the season and so you have to see what is needed at that time for the garden and the elemental beings. For example, for Michaelmas, I would use meteoric iron and/or stinging nettle, oak bark and the Michaelmas daisy [purple fall aster] to represent the Archangel Michael.

AP: *And silver and rose blossoms?*

BW: Silver represents the moon and wisdom. The red rose blossoms represent the purified human soul evolving to the spirit self. These are substances that I use with every festival. Silica I use as well; it represents the forces of warmth and light that are associated with the outer planets of Mars, Jupiter and Saturn. It is also a good substance for grinding. The limestone as calcium carbonicum relates to the forces of the inner planets: Moon, Mercury and Venus. These substances become powerful forces for relating to the elemental world. All elemental beings need the human being to be interested in them and they need the human being to help free them from enchantment or imprisonment in matter. They are enchanted in matter because they serve higher Hierarchical beings in the process of creating matter. They are the forces and laws that govern matter. We can help them be disenchanted or freed from matter by recognizing and appreciating them. The elemental world is very, very important for our existence.

All cultures have worked with the elemental beings in the past: the Celtic, the Native Americans, the Hawaiians, and other indigenous cultures around the world and ancient cultures before them. Even today there are tribes in the mountains of Colombia who feel that if they do not celebrate their cultural festivals of appreciating the earth and the spiritual beings who create the earth, then the earth will die. They use substances and prayer in ceremonies to honor the spiritual beings in nature and in the earth. The people in the old Celtic part of Europe, Ireland, Scotland, Sweden and Norway are still much closer to the elemental world than we are. Probably twenty percent of the people there still have a relationship with it. We (Europeans in general and the United States) have lost that connection. Nobody was interested in them twenty years ago but more recently a greater interest has developed. In 1912, Steiner gave a series of lectures in Helsinki, now in the book, *The Spiritual Beings in the Heavenly Bodies and the Kingdoms of Nature*² that really began to revive this whole concept of spiritual beings in nature and behind creation. Since then many books have been published on the subject.

AP: *Am I understanding “enchantment” correctly? In the process of creating material life and transforming matter to other substances, the elemental beings/forces become attached to the material or “embedded” in matter and lose*

their freedom to be in their natural state? And our attention and intention can release them from matter much the same way that negative elementals or entities that have attached to humans or a place can be released through intention in ceremonies, shamanic rituals or prayer?

BW: Behind these formative forces of the elements of matter are intelligent forces that work with the creation and maintenance of the three kingdoms of nature including the human being. The elemental beings were required to work in matter with the hardening of the earth from the beginning of creation. The hierarchal spiritual beings above the elemental beings could no longer work directly in matter so the offspring of the Archai – the gnomes were required to work in the element of earth. The undines are the offspring of the Archangels and they work in the element of water. The sylphs are the offspring of the angels and they work in the element of air. The fire spirits are the offspring of specific higher group souls and they work in the element of fire. There are multiple numbers of elemental beings in all substances. A plant is created, maintained for a time, flowers, goes to seed and later dies with the work of the elemental beings. The elemental beings leave the growth of nature in the fall of the year and enter into the earth during the winter. They return in the spring to the outer nature to do their work. All living things are maintained by spiritual beings in their physiology and growth. The trees lose their leaves in the fall and most of the elemental beings descend into the earth. They then return in the spring to form new leaves, stems, flowers and seeds.

AP: *Although Steiner gave many lectures on the workings of the elementals, he didn’t use the term “elemental beings” in the Agriculture Course. He referred to their presence and action as processes or formative forces, forces of life, growth, warmth and watery influences.*

BW: The elementals are actual beings. The gnomes have a little more form and work in the earth, roots and growth coming out of the ground and in the mineral kingdom. The undines are with element of water and they work in the chemical ether. The sylphs work in the light ether and the air element and the fire spirits work in the realm of warmth ether and in the element of warmth. Even within the human body we have these kinds of elemental beings. They are processes and they are real spiritual beings. Many people have seen them clairvoyantly.

Yes, they are processes and they are real beings, spiritual beings and they are very important in matter. They are the forces and laws of nature.

Behind these formative forces or elementals are intelligent forces or consciousness. Even Max Planck and Einstein spoke about consciousness in the universe. One could say consciousness is of God or the Great Spirit or the Creator or

“Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.”

*—Albert Einstein quoted in an interview by G.S. Viereck, October 26, 1929.
Reprinted in Glimpses of the Great (1930).*

the Divine. Steiner has given us the concept that there are many, many spiritual beings at work within the Kingdoms of Nature and within the cosmos. The elemental beings are servants of these higher hierarchies. These hierarchies are beginning to be studied by many different people at this time. It is not just something that anthroposophists are interested in. I think many people are now interested in spiritual science and they want to know what is behind creation. Everything that human beings create has been created out of consciousness, everything from the most primitive arrowhead to the largest, most complex of human creations. The creation of the three kingdoms of nature, the human being and the universe are created out of consciousness. Everything has consciousness behind its creation.

AP: *Cutting edge science is starting to bridge the gap between science and spirituality and what Steiner said 100 years ago.*

BW: Science is evolving because there is a change occurring in the world with the end of the dark age of Kali Yuga [in Hindu mythology, the age conflict, corruption, materialism and patriarchy]. In 1944, Max Planck, a quantum mechanics researcher, had postulated that behind all matter is consciousness. And Albert Einstein, already in the 1920–30s said that he wasn’t interested in what God created, he wanted to know the mind of God. Many people are now entering this age of “Spiritual Enlightenment” which began about the year 1900. I have seen this change mainly in the past ten years, huge changes. There have been changes in the scientific world and even in medicine. We are living in very changing and exciting times and I think we have to work very hard to keep up with all the many scientific discoveries in the world that contribute to our understanding of spiritual science.

AP: *You have led a very active and diverse life. Are you retired now?*

BW: I am semi-retired and I still see a few patients. Some patients have Lyme disease and require physical scientific medicine along with anthroposophic medicine. It is a very virulent organism especially if it has become chronic. I have studied it extensively for many years and written a paper on it. The most prominent and the most virulent species of Lyme disease is *Borrelia burgdorferi sensu lato*. It has been said that it was possibly genetically engineered and accidentally released into the environment. Unfortunately, it

is spreading around the world including the United States, Australia, England and Europe. The early species of Lyme disease in the US and Europe were very mild at one time and sometimes didn’t even need to be treated, but this particular organism is very tough.

I also give workshops in many parts of the world and encourage bringing the thinking, feeling, and willing into celebrating the festivals in addition to using the healing substances. This form of celebrating the festivals is being practiced in communities in the United States, Ireland, Ecuador and other parts of South America and Europe.

Anthroposophic Medicine

Basil Williams, DO

To be an anthroposophic physician in the United States, one must have studied anthroposophic medicine and be a licensed physician as an allopathic physician (MD), Osteopathic Physician (DO) and in some states a Naturopathic Physician (NP). One also should have had training with a physician mentor knowledgeable in anthroposophic medicine.

Anthroposophic physicians will have the usual understanding and practice of the latest physical scientific medicine. Their medical practice depends upon their level of training and certification by Certifying Medical Boards. They may be specialized in different branches of physical scientific medicine as well as in sub-specialties. For example, I have been trained as an anthroposophic physician working in internal medicine and infectious disease. I also practice with the use of my hands in cranial osteopathy.

All anthroposophic physicians should study spiritual science and apply this knowledge, as taught by anthroposophic medicine, to every phase of their medical practice. They must learn how to bring therapy to the four-fold human being that has been created by higher spiritual beings out of the world of the spirit; the physical body, the astral body, the etheric body and the “I” or ego. They should continue to study the physical world and combine this knowledge with the knowledge of the spirit that enhances their ability to heal illnesses. This is the challenge of the modern anthroposophic physician.

I performed the ceremony several times at workshops at the Goetheanum in Dornach as part of the Medical Section. I closed a Curative Education Conference in Ecuador with 250 people actively participating in a St. John's festival and I just returned from Australia where we celebrated St. John's festival.

AP: *Where will you be presenting and giving workshops in the coming year?*

BW: We celebrate all of the festivals of the year in community here in Harlemville, New York. I will work with any community that asks me to participate with them. I have a 46-page booklet that explains in detail how each festival is celebrated [see note 1]. The ceremony lasts about one and a half hours. Often faculty of a Waldorf School or groups associated with biodynamic agriculture will ask me to participate in their festivals. And I enjoy participating in the festivals with diverse groups that are not always associated with biodynamics or Waldorf schools. I have worked with indigenous groups and for the last four years I have given workshops with a Buddhist group.

From March 31 to April 1, I will be at the Harvard School of Divinity, "The Spirit of Sustainable Agriculture Conference" where I have been invited to give a workshop titled "A Communal Celebration of the Festivals of the

Year by Preparing Healing Substances with the Appreciation of the Spiritual Beings in Nature."

Earlier, on March 4 and 5, I will be at the Florida Anthroposophic conference titled "Anthroposophic Contributions to Medicine, Education, and Agriculture." During this conference I will discuss health and illnesses related to agriculture and will give presentations on "The Development of Biodynamic Home and School Gardens" and "Honoring the Spiritual Beings in Nature with Healing Substances." I will encourage working with biodynamics and the elemental world as very important community activities for the future of humankind.

AP: *Thank you, Dr. Williams, for sharing your love for the elemental world and for sharing the healing festivals substances with us.*

Notes

1. *Awakening to the Festivals, Elemental Beings and Healing Substances*, Dr. Basil Williams, p.7
2. *The Spiritual Beings in the Heavenly Bodies and the Kingdoms of Nature* is available on-line at Rudolf Steiner Archive, www.wn.rsarchive.org

Photos courtesy of Dr. Basil Williams

The Honoring of the Elementals with the Festival Sprays

Abigail Porter with Dr. Basil Williams

Dr. Basil Williams developed sprays with specific ingredients for each of the major festivals of the year. The intention is to acknowledge, nourish and show gratitude for the life processes, formative forces or "elementals" as they are referred to in spiritual science. The sprays are a supplement to the original biodynamic preparations and are used to nourish the processes and beings that make life possible in all of nature. Dr. Williams intended them to be made and used in community gatherings celebrating the festivals.

The community, after gathering some flowers or plant material from the garden that may be added to the mix used in the spray, sits in a circle and grinds the substances together with a porcelain mortar and pestle. Silica or beach sand is used as a base grinding material. The bowl is passed around the circle with each member having a turn, consciously bringing love and gratitude into the materials. When the substances have been ground as fine as flour (about 15 minutes or more), they are added to spring or rain water and stirred for an hour in the same way that biodynamic sprays are stirred to potentize them – by creating

a deep vortex and then reversing direction, which creates chaos until a new vortex is formed. This process is repeated for an hour with conscious intention. The amount of substance and water used will depend on the amount of land you want to cover (2.5 gallons will cover an acre). While the group is taking turns grinding and stirring, each member imbues his or her consciousness, feeling and will into the substances and water. Music may be played, songs sung, and poems or verses recited that relate to the festivals and to the forces of nature. Cedar branches are frequently used to disperse a spray over all the land; around the perimeter, around the buildings, and the areas in between with a special focus on the garden area.

The Festival Sprays

Dr. Williams uses gold, silver and red rose petals for all of the festivals and adds frankincense and myrrh (at the discretion of those preparing the festival) to both nourish the beneficial elementals and for protection from negative influences. Other appropriate substances are added for each

festival that are specific for the season of year and for the forces and symbols they represent relating to the significance of the festival, and what the soil and elementals may need at that time. The substances given are meant to be suggestions and Dr. Williams encourages us to develop a relationship with nature and to use our own intuition and insights in selecting substances for the land we are treating. Only a very small amount of each substance is needed, “the amount that would fit on the tip of a knife,” because powerful healing forces are released during the potentizing stirring process.

Christmas and the Winter Solstice Festival

December 21 is the winter solstice and has been celebrated since ancient times as the victory of the sun over darkness as the days start to lengthen. December 24–25 is celebrated as the birth of Christ and was previously dedicated to Adam and Eve and the origin of humanity. The substances suggested for use during these holy nights are:

Gold leaf (22kt): represents forces of the sun, the heart, divine wisdom and forces of the Christ

Frankincense (*Boswellia*): connection to the spiritual world and the Divine

Myrrh*: resurrection and overcoming the forces of death, transformation into the higher self

Silver leaf (sterling): represents the moon and wisdom

Red rose petals: represents the purified human soul evolving to the spirit self

Silica sand and/or BD #501 (horn silica): brings in forces of warmth and light and relates to forces that emanate from the outer planets of Mars, Jupiter and Saturn, and also provides excellent grinding material

Mistletoe leaf and berry: healing forces for the earth that are derived from ancient moon forces

Hawthorne leaf: provides heart forces for the earth

Needles of spruce, pine, cedar and hemlock of the Christmas tree: represent the tree of paradise and Saturn forces

Magnesium carbonate potentized to D6: provides spiritual forces of light during the darkness of winter

Queen of the Night Cactus (*Selenicereus grandiflorus*) or Night-blooming cereus: represents the healing forces emanating from the human heart. Primula or Evening Primrose may be substituted.

*Dr. Williams frequently adds frankincense and myrrh to many of the festival sprays since he published *Awakening to the Festivals, Elemental Beings and Healing Substances*.

The formulations for the festival sprays have been edited and reprinted from *Awakening to the Festivals, Elemental Beings and Healing Substances*, Dr. Basil Williams, p. 20–30.

January 6, Epiphany or Three Kings Day

The festival of Osiris was celebrated in ancient Egypt on January 6 and before 353 AD, the birth of Christ was celebrated on this day. Since then it, has been designated as the day that John the Baptist baptized Jesus and that the Christ Spirit entered his body. It is also celebrated as the arrival of the three kings bearing their gifts to the Christ child. Hugo Erbe's Three Kings Preparation of gold, frankincense and myrrh is used as a healing substance for the elementals and as protection from the activities of opposing or negative forces.

To make the spray, 30 grams each of gold (D2), frankincense and myrrh are ground together with a porcelain mortar and pestle over the midnight hour of December 31 from 11:30 PM to 12:30 AM on January 1. To this powder, add 50 grams each of vegetable glycerin and rainwater and thoroughly mix for an additional five minutes to produce an emulsion. This is the stock, which will keep for years without losing its potency if it is kept in a dark, cool place, in an airtight glass container away from electrical fields. On the afternoon of January 6, mix one teaspoon of this emulsion with a small amount of hot water to dissolve it before adding it to the container holding two quarts of warm water from rain, snow, a spring or chemical-free tap water, and stir for one hour using the same stirring method used for biodynamic horn manure and horn silica preparation sprays (creating a deep vortex in alternating directions). If tap or well water is used, it should sit in the sun for 1–3 days to be energized and to allow chlorine and other chemicals to volatilize. Clay, wood or glass containers are preferred for stirring though plastic or non-magnetic stainless steel may also be used. Do not use aluminum or zinc plated steel. The spray should be applied immediately after stirring and is applied in the late afternoon or early evening as the earth is breathing in. A clean sprayer, brush, or bundle of twigs may be used to disperse the spray water. The spray is applied to the full boundary of the property with pauses about every fifteen feet to spray outward toward the neighboring lands. At least two quarts of liquid are required for approximately 3,280 feet of boundary or the perimeter of sixteen acres. The perimeter of one acre is approximately 835 feet. The amount of water and materials can be adjusted according to the size of your perimeter. You may want to use plenty of water the first time you apply so you see how much water is needed according to your application method as you make a circle of protection around the area. [From *Hugo Erbe's New Bio-dynamic Preparations*]

Easter and the Spring Equinox

The earth exhales in the spring and the forces of nature and the elementals rise from the earth into the plants, the

atmosphere and the cosmos. The spring equinox (March 20) with the accompanying increase of warmth, light and growth has long been celebrated with offerings and rituals for a productive growing season and harvest. With the advent of Christianity, the Mystery of Golgotha, the resurrection of the Christ and the rebirth of nature are honored. Easter is a moveable date determined by the constellations and unites the human being with the cosmos. It falls on the first Sunday after the first full moon of spring. In addition to gold, silver, frankincense, myrrh, silver, silica sand and red rose petals the following substances are used:

Tourmaline crystal: representing the Christ and cosmic transformation

The major grains: seeds of organic oats, barley, wheat, rye, corn, millet and rice providing healing forces for the human heart

Fruit: represented by grape or grape juice, provides the healing forces of the human blood system

Root: represented by carrot, provides healing forces for the human brain

Limestone (calcium carbonate): relates to cosmic forces of Mercury, Moon and Venus

Cinnabar – homeopathic D6: symbolic of the healing forces of Archangel Raphael

Shasta daisy or wild daisy (Leucanthemum): has dove-like white petals and a sun-like center honoring the Holy Spirit

Calcium carbonicum: is a salt that represents the ground of the earth and the Rosicrucian alchemical “salt process”

Sulphur: Rosicrucian symbol for combustion, purification and sacrifice

Oil of Pine: “Sulphur process” in Rosicrucian alchemy. Honors old Saturn where evolution of humans being began

BD #500 (horn manure): stimulates germination, root growth and humus formation. Brings healing forces to the earth and is beneficial for the gnomes (earth/mineral beings) and undines (watery processes)

The Summer Solstice, Midsummer and St John's Tide

Midsummer traditions originated in pre-Christian times and frequently were celebrated around a bonfire. Some cultures paid special tribute to medicinal plants during this time. The summer solstice on June 21 is the longest day of the year and the June 24 marks the birth of John the Baptist. Gratitude and love are given to Mother Earth, the beings in nature, the Trinity, Archangel Uriel and to each other. Gold, silver, frankincense, myrrh, silver, silica sand and red rose petals are used in addition to the following:

“When you heal the earth you heal the human being and when you heal the human being you heal the earth.” – Rudolf Steiner

The Whitsun Festival

Whitsun, also called Pentecost, is celebrated fifty days after Easter or the seventh Sunday after Easter and commemorates the descent of the Holy Spirit upon Christ's disciples (ten days after the ascension of the etheric Christ). It is a celebration of the free human individuality and Christ connection to human evolution. Late spring flowers are blooming and the approaching summer abundance and fertility is in the air. The Whitsun Festival honors the Trinity, the Hierarchies, the elemental beings and the alchemical processes of working in nature with sulphur, mercury and salt. In addition to gold, silver, frankincense, myrrh, silver and red rose petals the following substances are used:

BD #501 (horn silica): brings cosmic forces to the earth. Helps and encourages the work of the sylphs (air) and the fire spirits

Cinnabar, homeopathic D6: the healing forces of Archangel Raphael, and the mercury forces. “To the Rosicrucian alchemists, the ‘mercury process’ of dissolution was activated in the soul as love and reverence for the Trinity. It was also connected with love for each human being.”

St. John's wort blossom (Hypericum perforatum): symbol for St. John the Baptist

Silica sand, ground quartz, and/or BD #501 (horn silica): represents forces of warmth and light and these are the forces which radiate from the outer planets of Mars, Jupiter and Saturn and also provide excellent grinding material

Limestone: represents the forces of the inner planets – Mercury, Moon and Venus

Seashells (calcium carbonate): representing forces of the animal kingdom

Michaelmas and Fall Equinox

The September 21 equinox is celebrated as summer transitions into the fall season, with the withdrawing of life above ground. It is a time of harvest festivals and meteor showers. The role of Archangel Michael overcoming the dragon of materialism is acknowledged on September 29th and through the autumn. In addition to gold, frankincense, myrrh, silver red rose petals and silica, the following substances are used:

Michaelmas Daisy blossoms/petals (Aster amellus), fall purple aster: Archangel Michael

Ferrum siderum or meteoric iron potentized to D10: symbolizes courage and Archangel Michael

Oak leaf or bark: represents the forces of Mars and iron, also calcium

Sunflower blossoms/petals: symbol of the sun

Stinging Nettle or *Urtica* leaves: forces of iron

In *Awakening to the Festivals, Elemental Beings and Healing Substances*, Dr. Williams goes into much more detail about the meaning of the festivals and the purpose and symbology of the substances used. One chapter is devoted to the four kingdoms of elemental beings (the gnomes, undines, sylphs and fire spirits or salamanders) that are responsible for the life processes in nature. Another section focuses on the “Rosicrucian Alchemical Processes of Sulphur, Mercury, and Salt in Nature.” The booklet is available through JPI for \$20.00.

Resources

The Three Kings Preparation kit for Epiphany is available from JPI and will treat up to 90 contiguous acres. For all the other festivals a small amount (the tip of a knife) of the frankincense and myrrh resin and the homeopathic gold (*Aureum metallicum* D2) may be used. One kit would be enough for many festivals. Or if you have extra mixed emulsion from left over from Epiphany, a small amount (three knife tips worth) of that may be used.

BD #500 (horn manure) and BD #501 (horn silica) are available at JPI.

22kt gold leaf and silver leaf can be obtained from fine art and jewelry supply companies and stores. Filings from pure or sterling silver and 22kt or 24kt gold may also be used.

Frankincense and myrrh resin may be found in New Age shops. Ask if it is irradiated, as that would compromise the healing effect.

Tourmaline and other minerals are available in New Age shops that carry crystals as well as at stone and gem shows.

Homeopathic remedies in potencies may be obtained from Uriel Pharmacy (www.urielpharmacy.com), Weleda, Washington Homeopathic Products or other homeopathic suppliers. Look for potencies 10D or 12x and lower. Homeopathic versions may be substituted for some of the substances.

Essential oils may be substituted for some of the substances depending upon one's relationship with that oil and the festival being celebrated. Look for pure organic ones without additives.

Herbs, flower blossoms and other plant materials may be grown in your garden, wild harvested or organic ones may be available in herb shops, health food stores, and from herb suppliers like Frontier Natural Products.

For questions, or if you have difficulty in obtaining materials, Dr. Williams may be contacted at: basilw7@earthlink.net.

References

Awakening to the Festivals, Elemental Beings and Healing Substances, Dr. Basil Williams

Hugo Erbe's New Bio-dynamic Preparations, Hugo Erbe, et al.

Dr. Basil Williams Recommended Reading List

Nature Spirits: Selected Lectures – Rudolf Steiner, \$25.00

Harmony of the Creative Word – Rudolf Steiner, \$22.00

The Four Seasons and the Archangels – Rudolf Steiner, \$16.95

World Ether, Elemental Beings, Kingdoms of Nature – Rudolf Steiner compiled by Harold Jurgens, \$26.50

Michaelmas and the Soul Forces of Man: A Lecture Given in Vienna – Rudolf Steiner, September 28, 1923 (not available from JPI)

Additional Background Reading on the Elementals

Nature Spirits and What They Say – Stael von Holstein/Weirauch, \$25.00

Nature Spirits of the Trees: Interviews with Verena Stael von Holstein – Edited by Wolfgang Weirauch, \$25.00

Nature Spirits – The Remembrance: A Guide to the Elemental Kingdom – Susan Raven, \$25.00

The books listed are available for purchase on our website at <https://www.jpibiodynamics.org/product-category/books/>.

Epiphany

May the revelation of the Christ
Shine out to the world,
Granting to the mind
Understanding
As clear as gold.

May the love of the Christ
Stream fourth to souls,
Kindling in the heart
Prayer
As rising incense.

May the deeds of the Christ
Be known by men's spirits.
Teaching in the hands
Devotion
As healing myrrh.

From *Meditative Prayers for Today* by Adam Bittleston

The Season When the Earth is the Most Inwardly Alive: Biodynamic Practice September through March

Karen Davis-Brown

Every farmer and gardener far enough north or south of the Equator senses it, observes it, works by and with it, regardless of how mechanized and industrialized their operation has become. The shortening of the days, the cooling of the air, the colors changing from green to brown as the growing season comes to an end. If one slows down long enough to truly experience what his or her senses reveal, one experiences what can be termed the “inbreathing” of the Earth, as gravity and lack of vitality draw the once-living leaves down to her surface. For a while, the Sun seems to grow more distant and the Earth seems to go to sleep. Then, the Sun “stands still” at winter solstice (December 22) and seems to turn around and come back, as the days slowly become warmer and longer.

In biodynamics, we have learned to appreciate this year-long cycle as a whole, and to understand the importance of this seemingly dormant time. We have also come to appreciate and celebrate the festivals that mark this changing of the seasons. During the time between Michaelmas in late September and Easter in March or April, we are offered the opportunity for planning and introspection regarding the coming year – once we have made sure that our land is properly “put to bed” for the winter.

Michaelmas

Applying biodynamic preparations

As each bed or field yields its last harvest for the season, the regime of applying: 1) horn manure (BD #500) and 2) compost (or if compost is not available, barrel compost, prepared BD #500, or BD Pfeiffer Field and Garden Spray), and then 3) sowing a winter cover crop mix supports the land in rejuvenating itself during this time of rest.*

Making biodynamic preparations

Since many of the preparations are buried in the Earth over the winter months, to absorb the cosmic forces so active beneath the ground during this time individuals and groups all over the continent celebrate the season with a day of preparation work. During this time, cow horns are filled with manure and buried to make horn manure (BD #500) for the following year, and horn silica (BD #501), which has been in the Earth during the summer months, is dug up and stored. Blossoms and animal sheaths that have been collected over the year are brought together and buried in different areas of the land. Chamomile in cow intestines and dandelion wrapped in the cow’s mesentery are prepared

for burial, and stag bladders stuffed with yarrow blossoms that have been hanging for months in the summer sun are all buried at the right depth and in their own corner of the farm or garden. Many bury stinging nettle (which requires no animal sheath) at this time, though it can be buried any time and left for the year’s cycle. The cow’s skull can be filled with ground oak bark and placed securely in water that will continue flowing through the winter.

Compost

In more northern climes, it is time to clean out the manure and bedding from the barns, stalls and loafing areas before the cold weather comes. They provide the perfect materials at a great time for building compost.

Tree paste and foliar sprays for frost protection

It is also time, once the trees are bare and the sap has slowed, to apply tree paste to the trunks and branches in preparation for the anticipated first spring growth.* A spray of the same juice of valerian flowers (BD #508) that is used to complete a compost pile can be sprayed on trees and other crops to provide a bit of warmth, if a hard frost comes too early. Fermented or unfermented nettle leaf and horsetail teas can also be applied separately or in combination, as a foliar spray, when conditions are too wet for the last of the season’s crops to grow in a healthy way.

Planting calendar

Lastly, it is time to obtain a planting calendar, to begin planning for the coming season when the last outside work is done. Planting calendars provide detailed information and suggestions regarding when to complete certain tasks based on the movement of the sun and stars, and particularly the moon. There are several excellent calendars available for North America with different ways of providing information and guidance for the new and experienced producer.*

Christmas and the Holy Nights

From Michaelmas to Christmas, growth slows and seems to stop. The light wanes, the warmth of the Sun seems to weaken and, here in North America, its angle shifts to the southern horizon. There comes a time when the last field or bed has been tended, and winter arrives.

Anyone who thinks this is a time when a farmer or gardener has nothing to think about or do is mistaken. While the Earth sleeps and rejuvenates herself – so much activity in her depths during this time! – the human being engaged

in agriculture is doing his or her own inward work, and beginning to consider what will be needed by the land in the coming spring.

Planning

With the help of one or more planting calendars, one begins to plan 1) how much 2) what, and 3) where planting will occur the following season. What were drainage and light like in that place last year? What has been planted there the last couple years? What is needed in terms of fertility and weed/insect management? What new crops may be added, or old ones put to rest for a while? What new places may be tilled and planted, or well-worked fields should lie fallow? This envisioning and intention, as an individual or group, is key to the success of the season.

The Holy Nights

The “twelve days of Christmas” between December 25 and January 6, in Anthroposophy, are called “The Holy Nights,” and it is believed that, during this time at the turning of the year, we may interact with the spiritual world and tap into the forces in the Earth in a special way. While we are celebrating the holidays in the warmth and light of each other’s company, it is also a time to meditate on one’s vision and hopes for the coming year, in an overarching and intentional way.

Burying seeds

Some biodynamic practitioners bury the seeds for the coming year in a waterproof container in the Earth, and leave them there for at least the twelve Holy Nights. In doing this, the seeds are exposed to the cosmic forces that are concentrated and radiate out from the minerals beneath the Earth’s surface during this time.

Three Kings Preparation

The Three Kings Preparation was developed by Hugo Erbe as an offering and source of spiritual protection to the elemental beings on one’s land. The three symbolic gifts offered by the Magi to Christ – gold, frankincense and myrrh – are rich with symbolism. Gold is an archetypal symbol of wisdom, frankincense of sacrifice, and myrrh of the triumph over death. Together, they serve to support us in our awareness and connection to the spiritual world.

These three substances are ground together at the midnight hour of December 31/January 1, and then stirred and sprayed on January 6 – the celebration of the Baptism of Jesus and the last of the twelve days of Christmas. The preparation is sprayed on the outer perimeters of a piece of land (quite the challenge where the snow is deep and the temperatures below freezing) as warning and invitation to all spiritual beings that this land is consecrated to loving service and only benevolent beings are welcome. In this way, one’s land and one’s body, soul, and spirit, enter the New Year.*

Easter

Winter solstice in late December marks the shortest day of the year. The following day (regardless of what our senses tell us), the Sun begins its climb back up in the sky. January and February are still cold and dark, but March and April follow more quickly than we anticipate, and soon we can feel and see the warmth and light return. It is time for our winter work to manifest in the outward beginning of the growing season.

Internally and externally, our activities during this time mirror and bring closure to those of the Michaelmas/autumn season. In late winter, before sap flow and bud break, an additional application of tree paste may be warranted, or just used as a cautionary measure. The manure in barns defrosts and new compost piles can be built. Trees and other perennials start to “push” and may need regular sprayings of valerian, horsetail and nettle teas. Seeds will be dug up, if they were buried, and the first seeding of “starts” begins. Cover crop is tilled in with an application of BD #500, barrel compost or the Pfeiffer field spray; mature compost is applied and the fields are made ready for the first spring planting.

As the spring equinox approaches, trees seem to burst with the first leaves and blossoms of the season, the pastures begin to develop lush spring grass, and the seedlings that we have tucked away in warm, inside spaces, reach for the Sun. The Earth and her beings have, indeed, come out to play, and we also need to turn our faces toward the light and warmth of the outdoors. There is an Easter hymn that captures the feeling of this season:

*Now the green blade riseth from the buried grain,
Wheat that in dark earth many days has lain.
Love lives again, that with the dead has been.
Love is come again, like wheat that springeth green.*

And so the Earth begins to breathe out, and the movement toward Saint John’s Day and Michaelmas begins.

*For more information, look on JPI’s website or call 540-745-7030.

Further Reading

Erbe, H. (2003). “The Three Kings Preparation.” *Hugo Erbe’s New Biodynamic Preparations*, pp. 64–6. Gloucestershire, England: Mark Moodie.

Steiner, R. (1993). *Spiritual Foundations for the Renewal of Agriculture*. M. Gardner, trans. Kimberton, PA: Biodynamic Farming and Gardening Association.

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Williams, B. (2011). “Celebrating the festivals of the year.” In *Awakening to Festivals, Elemental Beings, and Healing Substances*, pp. 20–30. Ghent, NY: Chrysalis House.

Building Your Farm Strength

A Conversation with Jamie Fochuk by Hunter Francis

This fall, I had the pleasure of talking with young biodynamic farmer, Jamie Fochuk. I was in search of anecdotes – stories from the field. Fortunately, Jamie is not shy and generously shared his insights. It was a delightful experience. Jamie's enthusiasm for biodynamics and for farming in general is inspiring. For over a decade, he has been feeding a strong appetite for knowledge by consulting with some of the leading figures in biodynamics on this continent. He is the type of person who aggressively pursues his dreams. He seems to know what he wants and he is precise in his search for it. Even in researching and selecting his farm site, he took time to study conditions meticulously. He made a fairly comprehensive survey of altitudes, aspect, water sources and weather patterns in the area he wanted to settle.

Jamie is the founder and general manager of SOACH Wine Estates in southern British Columbia, at the northern extremity of the Great Basin, not far from the US border. He has been farming on his property for about ten years, after having cleared what was once virgin forest. The farm now consists of approximately twenty-two acres of vineyards, eight acres of fenced crops, seven acres of pasture, two acres of orchard and about as much acreage in wildflowers. The rest of the land is still forested. Prior to working his own land, Jamie worked for Martin Ross, a well-known orchardist in the area, in addition to several wineries over seven years. Jamie also grew up on a conventional farm and spent some time working as a professional skier and "snow farmer." He studied viticulture at the University of Ontario in Guelph, near his childhood family farm. I asked Jamie to explain a typical year on his current farm, with a focus on how he employs the biodynamic preparations.

Jamie makes all of his own preparations with the exception of the Pfeiffer Field and Garden Spray and the valerian preparation (BD #507). He is very passionate about the use of barrel compost (BC) and recommends that everyone make their own. "If you can make compost, why can't you make BC? It's great for your farm, plus it makes a great gift for anyone who gardens." He sprays BC three times in the fall. Unless there are drought conditions, in which case he leaves ground cover to retain moisture, he mows before spraying BC. Sometimes after mowing, he will use the Pfeiffer Field and Garden Spray instead of using the BC. He will then rip or cultivate the soil, followed by an application of BC, then another cultivation and yet another application of BC before listing or preparing the soil for planting the following spring. Water on his property is provided by a natural spring and he has developed the

habit of spraying leftover BC around the opening of the water source. He also applies compost in the fall before rains come, and sometimes in the spring.

At the New Year, Jamie uses the Three Kings preparation. His recommendation here was to be sure to use good quality water – as one should with any of the sprays. He only uses pure water from his spring. "Make sure your water is magic," meaning very clean. Disinfectants such as chlorine, fluorine or bromide "kill everything."

Not surprisingly, given Jamie's big personality, he has a tendency to "over prep," meaning that he will commonly spray more than the recommended amounts of any given preparation that one would spray on the ground (as opposed to tree paste, for example.) He thinks generous dosages of the preparations are particularly appropriate on newly converted biodynamic parcels, where one is trying to kick start healthy biological cycles. For instance, he uses double what is customary for the BD #501 spray, though he does live in a relatively wet area compared to other parts of the arid American West. For other preps, especially the BD #500, he will quadruple recipes. If a quarter cup per acre is called for, he might use a cup. He uses copious amounts of barrel compost, applying it liberally.

He is a strong believer in the horsetail preparation (BD #508) and he uses it fresh (not fermented). He also tends to use that preparation before applying the BD #501. "The 508 has a softer energy than the 501," therefore if one is going to use either of them early in the season (before the spring equinox), he recommends the BD #508. "It helps get the plant ready." Normally, he doesn't use the 508 more than three times – "once may be enough if you are in a really dry area." He will only use the BD #501 after the spring equinox, ideally after the plants are established and "looking good." If one uses BD #501 too early in the season, one risks "frying the plants." Nonetheless, he does recommend use of both preparations at least once, even in very dry places. "It could be in the fall for beautiful fruit." In his case, he uses the BD #501 twice in the fall, once twenty days before harvest and once ten days before harvest to help bring out the full flavor of the fruit, such as with grapes. He says the BD #501 has a tendency to suppress the plant's vegetative function, so one should be careful of using it on a crop like lettuce, for instance. He does foliar applications of stinging nettle (BD #504) four times per year.

In all of his recommendations, Jamie was very cautious to add the caveat that one's particular circumstances are of extreme importance; therefore, although one can make

generalizations, there is no recommendation that is universally applicable. He gave the example that there is a relatively high silica content in the soils of the Indian subcontinent, making it a “meditative place” and perhaps less in need of the BD #501, whereas the (more “materialistic”) North American continent has denser, heavier soils in comparison and may need more BD #501 in places, particularly in the East. Australia, one of the oldest continents and notorious for its poor native soil fertility needs “BD #500 poured on like syrup!” “Everything depends on where you live,” he says.

Jamie readily testifies to the power of the preparations. In fact, he says they can be so strong, they can have unintended effects. For instance, he knows of vintners who have had excessive yeast growth because of over application of tree paste and the nutrient it provides. Biodynamics seems to turbo charge many natural processes, but excessive vigor is not always desired. When everything is working together in biodynamics, however, “it builds farm strength – it’s very effective.” He also attests to the power of astrological rhythms. Jaime recommends following the biodynamic calendar closely. Harvesting on the right day, for instance, can help maintain shelf life and prevent a lot of waste.

Jamie has learned a lot from and highly values his mentors. He would like to see a more formalized teaching for serious, advanced practitioners – a “masters level program” that would harness the wisdom of the movements’ wisest leaders. Someday, he would like to teach others, but for now, he says, “I’m still in college.” He stresses the importance of practice in educating oneself. “Your best insights come

through practice – through doing it. Experience is everything.” One should immerse oneself in whatever one wants to be good at – farming or otherwise. With time, you develop expertise and find what works for you. He said it took him a long time to get the perfect rhythm for stirring the preparations in water, for example. He recommends a forty-eight second stir in one direction, followed by a four second pause, then a forty-eight second stir in the other direction and so forth. Worried about the electric vibration around an electric stirring machine? He recommends putting a lead shield around your energy source.

Jamie’s persistence and gusto for his work came through in a strong way. His stories were a testament to breaking through inertia. “You’re going to fail ten times. You are going to stink at it ten times. Just do it – even if the conditions aren’t right.” He was referring to the fact that it took him a long time to spray the horsetail preparation (BD #508) because it would rain every time he was about to spray. In the end, he finally “just did it,” and got over the hump. (Normally, one avoids spraying BD #508 in the rain. In general, Jamie tends to use a lot of BC, BD #500 and compost, regardless of weather conditions. For other preparations, he is more conservative about timing.) Jamie would probably say that part of his own vitality comes from the vitality of the food he eats. He definitely notices that vitality in his children, who possess noticeably more stamina than their peers. Perhaps a new generation will usher in a new vitality for the movement itself. Biodynamics NOW!

Anecdotes: Winter Burial of Seeds

Mac Mead

I am not sure when the practice of burying seeds during the Holy Nights started, but I learned of it in 1975 when I began doing biodynamics in Spring Valley, New York. Pfeiffer used this method to really enhance seed quality especially when he was developing a special strain of wheat. I believe the logic of it is described in Lecture 2 of the *Agriculture Course*, when Steiner says that just before and after the mid-winter time of January 15 to February 15, “... especially before, when the minerals are just getting ready to become formed and crystalline – that is when the minerals radiate forces that are of particular importance for plant growth.”¹ The Holy Nights come in this time just before the mid-winter.

The other part of the logic is that most seeds in their original natural environment would have fallen to the earth through a dormant period before beginning new growth in the appropriated season. This exposure to the earth begins the real fructi-

fication process of the male seed meeting the mother earth. Exposing the seeds to the mother earth in her most fertile time already brings very positive influences to bear.

As I was taught from some of Pfeiffer’s coworkers, you place your seeds in waterproof containers. Glass is good but plastic can also work. You then bury them like burying a biodynamic preparation in a fertile, well-drained area. You can do this for as little as the Holy Nights (December 24–January 7) or for longer. I usually put our seeds in large glass containers and then put those jars in a wooden or plastic crate or box. I often dig a deep hollow down the middle of a raised bed and place the containers in a row and heap the soil back over them. You have to make sure that everything is watertight because some years can bring extensive rainfall. In trials I’ve done with a control and the Holy Night seeds during the growing season, we often see an increased

vigor, vitality, and better flavor in the Holy Night plants. I'm happy to field more questions about this. Another side effect of doing this is that you form a picture of your coming season and order your seeds early in order to bury them.

It's nice to take the picture of your next season into this special winter holiday time.

1) *Agriculture*, Rudolf Steiner (Creeger/Gardner translation) p. 33

Demeter Hosts Biodynamic Garden and Lounge

Hunter Francis

Demeter USA once again treated sustainable agriculture and heirloom enthusiasts to a beautiful informational booth and display in September at the National Heirloom Exposition in Santa Rosa, California. The 40,000 square foot installation included demonstration gardens illustrating biodynamic principles, a classroom for lectures and an artful lounge where attendees were offered free Biodynamic yerba mate and juices. As always, the Demeter booth was a popular spot for people to

meet informally and just relax. The booth has also served as an effective way to spread the message of biodynamics to a wider audience interested in many principles biodynamics has been espousing for decades: biodiversity, on-farm fertility, natural pest control, soil/water conservation, integration of livestock, gentle post-harvest handling, and, of course, use of the biodynamic preparations and calendars!



VIP visitors at Demeter's booth: Vandana Shiva, Ronnie Cummins of the Organic Consumer's Association and John Roulac of Nutiva (R to L)

JPI Volunteer Days – Making BD #500 (Horn Manure) Thank You!

We would like to extend our heartfelt gratitude to the volunteers who traveled to JPI for the three days of stuffing the many cow horns needed to supply farmers, gardeners and vineyards with horn manure: Kristen Kowzan, Sarah

Bowles, Nina O'Malley, Katrina Brown, Lynn Summers and husband, Terry Williams, Katie Williams, and the Kretschman family. Your efforts help to make our work possible.



Nate Kretschman (above left) with JPI staff member Larry Mabe (above right) and Melissa Kretschman (at left) stuff horns for BD #500 at our fall volunteer days

Frequently Asked Questions: Compost

Abigail Porter

How often should I be using compost?

The frequency of compost application depends on your individual situation. It depends on the fertility, humus and microbial activity of your soil, your climate, the crops you are growing, what other soil building methods you are employing, your crop rotation, the quality and content of your compost, how intensively you are planting, and how frequently you use all of the biodynamic preparations.

For very fertile soil, a maintenance application of once a year for garden areas may suffice if you are using all of the biodynamic preparations and rotating crops from heavy feeders to soil builders to light feeders. Normally, a dusting of compost is sufficient, almost as if one is peppering a meal. In garden settings, which are smaller, a thin layer ($\frac{1}{4}$ to $\frac{1}{2}$ inch could be applied and mixed in). On farms, compost applications are commonly around ten tons per acre, which turns out to be more of a “dusting.” Ehrenfried Pfeiffer recommended applying the compost made during the summer to open ground in the fall and working it into the top three to four inches of soil to allow the influence of the winter forces. For heavy soils, he recommended keeping the soil bare with furrows so the freezing and thawing would help break up the soil. For other soils, and especially if there is danger of erosion or washing, it is best to plant a cover crop such as annual rye or one of the winter cover crop mixes. In the early spring, the crop would be disked or worked into the top three to four inches of soil with an application of horn manure (BD #500), BC (Barrel Compost), or Pfeiffer Field and Garden Spray to provide micro-organisms to speed decomposition. Compost made during the winter can be used to side dress longer season heavy feeders, such as tomatoes, several times during the season, or anywhere compost was not applied in the fall.

If you are growing for market and planting intensively and replanting beds three to five times during the season with heavy feeders such as fast growing lettuces, you would want to apply some compost before each planting. Alternating with light feeders like radish or salad turnips would be better than planting the same crop consecutively and little or no compost may be needed until lettuce is planted again.

Crop rotation is recommended to prevent one-sided depletion of nutrients and to reduce plant disease and insect damage. Rotations of three to five years are usual depending on your geographic area, climate and what crops are grown. A common rotation is heavy feeders (tomato, lettuce, garlic, cabbage or squash) followed by nitrogen-fixing legumes (peas or beans) that improve the soil after being depleted

by heavy feeders. Light feeders (most root crops) would be the next rotation followed by a winter cover crop or rest period with a cover crop or green manure mix. A variation for a single year with faster growing crops might be lettuce, followed by radishes, followed by bush beans and maybe a late crop of cilantro, arugula or radishes. The following year, tomatoes could be planted following a generous application of compost. Companion planting is another way to reduce nutrient loss. Complementary plantings, like the “Three Sisters” (corn, beans and squash), is one example. It is helpful to use horn manure or Pfeiffer Field and Garden Spray (which contains horn manure) each time you plant and transplant to stimulate strong root growth and increase micro-life and humus formation in the soil. Sprayings of horn silica (BD #501) and *Equisetum arvense* (BD #508) at appropriate times will improve plant health and resistance to disease and insects, and improve flavor. Areas under five acres seem to benefit from more frequent application of the preparations, whereas larger acreage may not need treatment as frequently to maintain the energetic field effect of biodynamic forces. Perhaps the success of biodynamics in Australia may be attributed to thousands of contiguous acres being treated biodynamically. Although today, with all the life compromising chemicals in the water, air and rain, more frequent use of the preparations even on larger acreage may help counter the destructive forces. The original recommendations that Steiner gave almost 100 years ago were for farms of several hundred to several thousand acres in size and were for farms in northern latitudes.

The 900-acre Hack farm (grain and cattle) in Ontario, Canada is a successful example of the use of the preparations, and compost on a larger farm. Uli Hack applies biodynamic compost (5–7 tons per acre) on only 20–25% of the tillable land annually in a four to five year rotation. That is the amount of compost that can be produced annually from the cattle on his farm and it is applied in the fall. However, he also rotates crops, and grows green manure (a mix of at least eight varieties of legumes and grasses with tillage radishes) or fertility building cover crops annually in all the fields. He under-seeds all of the grain crops with legumes for green manure, pasture or hay for the following year and turns the cattle into the grain fields after harvest. He uses all of the biodynamic preparations; barrel compost once a year, and BD #500, BD #501 and BD #508 twice a year on most of the fields.

Through experience and observation, you will develop a system that works for the benefit of your individual situation.

How much compost should I use?

Again, that would depend on your individual situation and what crops you are growing and whether you are using compost with manure in it or if it is solely garden waste and leaves. Tomatoes like more compost and do well with less finished compost whereas carrots may need none or just a light sprinkling of *very* well composted material. Some people who have an abundance of leaf and hay compost plant directly into a bed of well transformed compost.

More important than the quantity of compost used is the quality. Compost is the foundation of fertility in biodynamic practice yet frequently once a pile is made, it is abandoned for 6–12 months or until it is needed. At the spring JPI workshop, Bruno Follador stressed the need to develop an ongoing personal relationship with the compost as it is transforming. The pile should be checked at least monthly, possibly weekly for the first month to monitor moisture, to insure that it is not too wet and becoming anaerobic and rotting in a foul way, or too hot and dry and burning up nutrients. During excessively wet or extreme hot, dry weather, the pile should be checked more frequently to make sure the transformation is occurring in a beneficial way. If it is too wet, fluffy dry material (i.e., leaves or straw) will need to be added as you turn the pile. If it is too dry or hot, fresh green material and/or water is added in layers when turned. If either condition has become too extreme, the pile would benefit from another treatment of compost preparations or Pfeiffer Compost Starter once it has been turned with the added remediating materials. A breathable commercial compost cover or thick layer of straw covering the pile may be needed to protect the pile from the elements to prevent the loss of nutrients through leaching, volatilization or drying. Poorly made compost may actually be detrimental to your soil rather than beneficial.

How much compost makes a ton?

Depending on the moisture content, a cubic yard of compost weighs approximately 1,500 pounds. So, a ton (2,000 pounds) of finished compost would occupy a volume which is slightly larger (about $\frac{1}{3}$ larger).

A ton of materials to make compost would take up a larger volume and would depend on the materials. Dry leaves, hay and older vegetation have a larger volume by weight than wet manure or wet kitchen garbage. Generally, the volume of a ton of mixed materials to make compost would fill the eight foot bed of a full sized pick-up truck.

One unit of the BD Pfeiffer Compost Starter will treat up to $1\frac{1}{2}$ tons or about 2.25 cubic yards of material to be composted and has the advantage that a unit can be subdivided for smaller piles. A four-foot by four-foot pile is considered

the smallest size adequate for moisture and heat retention. Another advantage of the Starter is that portions of one unit can be used on a weekly or so basis if you are building your pile over time to help the decomposition go in a beneficial direction right from the beginning and to avoid nutrient loss. To treat a larger volume of compost that is made all at one time, a set of the compost preparations is more economical as it will treat up to 15 tons of materials which is a pile about twenty-one feet long and six feet wide and five to six feet tall with steep sloping sides. A smaller pile still needs the whole set.

Do I need to use manure when I make compost?

Manure is not needed but is beneficial in biodynamic practice to bring in the animal microorganisms, nutrients and energy. If it is difficult to find biodynamic or organic manure, just a few buckets of manure collected from the field of pastured cattle would be enough to make a manure tea to sprinkle in layers as you are building your pile. Avoid manure from animals recently treated with wormers or fed GMO and pesticide treated grains which will inhibit a healthy decomposition process. Some organic proponents that do not use any manure raise specific crops like comfrey and legumes for the compost pile.



Holiday Gift Suggestions

Looking for the perfect gift for family and friends? Something that will last through out the year and beyond? Check out our many offerings that contribute to the healing of the earth and humanity.

Biodynamic Planting Calendars

Stella Natura: Working With Cosmic Rhythms – \$14.95
(Published by and benefiting Camphill Village Kimberton Hills)
The North American Maria Thun Biodynamic Calendar – \$13.95
Celestial Planting Calendar – \$18.00

Preparations

Three Kings Preparation Kit: To be ground with mortar and pestle over the midnight hour December 31 and stirred and sprayed out on Epiphany, January 6. Nourishes the beneficial elementals and protects the area sprayed from negative influences – \$37.00

Pfeiffer Biodynamic Compost Starter: Contains all of the BD compost preparations. Treats 1½ tons of material and may be divided for smaller piles – \$12.00

Pfeiffer Biodynamic Field and Garden Spray: Contains all of the compost preparations plus horn manure (BD#500) Treats up to one acre and maybe divided for smaller areas – \$24.00

Biodynamic Beginner Kit #1: Contains both the Pfeiffer Compost Starter and the Field and Garden spray plus two units of horn silica (BD #501), one unit of *Equisetum arvense* (BD #508), and *The North American Maria Thun Planting Calendar 2016* and *Gardening for Life*, Maria Thun – \$92.95

Biodynamic Beginner Kit #1A: Same as above without the book. – \$62.95.

Other kits are available online: www.jpibiodynamics.org/product-category/biodynamic-kits

DVDs

Dancing With Thoreau: Nature in Our Modern World – By long time biodynamic farmer Chris Korrow. Effects of nature connection and disconnect; must see for parents, educators, administrators and anyone working with ADD and autistic children. – \$20.00

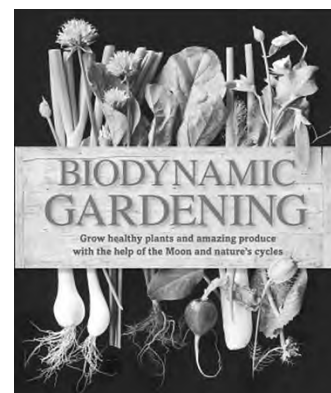
One Man, One Cow, One Planet – Peter Proctor's biodynamic work in India reviving soils and local economies. – \$32.00

Queen of the Sun: What are the Bees Telling Us? – Beautifully filmed documentary with beekeepers around the world. Gunther Hauk of Spikenard Honeybee Sanctuary is featured. – \$25.00

Books

Awakening to the Festivals, Elemental Beings and Healing Substances – Basil Williams, DO, \$20.00

Biodynamic Gardening: Grow Healthy Plants and Amazing Produce with the Help of the Moon and Nature's Cycles – New book by Monty Waldin for beginning gardeners to learn essential organic and biodynamic gardening techniques. Great reference book more experienced practitioners as well. Color photos on every page. – \$22.95



The Biodynamic Orchard Book – Ehrenfried Pfeiffer and Michael Maltas, \$17.95

Ehrenfried Pfeiffer: A Modern Quest for the Spirit – Compiled with intro by Thomas Meyer, \$18.00

Gardening for Life the Biodynamic Way – Maria Thun, \$30.00
Goethe's Theory of Knowledge: An Outline of the Epistemology of His Worldview – Rudolf Steiner, \$20.00

How to Know Higher Worlds – Rudolf Steiner, \$16.95

In the Light of a Child – Michael Hedley Burton, \$14.95

The Light Root: Nutrition of the Future, A Spiritual-Scientific Study – Ralf Roessner and Clemens Hildebrandt, \$16.00

A Monk in the Bee Hive: Short discourse on Bees, Monks, and Sacred Geometry – Skye Ann Louise Taylor, \$16.00

Nature Spirits and What They Say – Stael von Holstein/Weirauch, \$25.00

Nature Spirits of the Trees: Interviews with Verena Stael von Holstein – Edited by Wolfgang Weirauch, \$25.00

Reverence, Obedience and the Invisible in the Garden: Talks on the Biodynamic French Intensive System – Alan Chadwick, \$25.00

Thinking Like a Plant: A Living Science for Life – Craig Holdrege, \$25.00

When Wines Taste Best 2016: A Biodynamic Calendar for Wine Drinkers – \$7.95

The Wholeness of Nature – Henri Bortoft, \$35.00

To order any of the items listed above go to our website at <https://www.jpibiodynamics.org/>.

Holiday Office Closing

The JPI office will be closed from noon, December 24 until Monday, January 4, at 8 AM.

Thank you for your dedication to biodynamics and the healing of the Earth, and for your continued support of JPI.

Blessings to all of you for the festival season and best wishes and abundance for the New Year.

The JPI Team

Save the Date

January 15–18: The Agriculture Course – An Intensive Study of the Origins and Future of Biodynamics

The eighth annual midwinter intensive study of biodynamics at the Pfeiffer Center. This long weekend is a unique educational and social opportunity to broaden and deepen your understanding of the role of biodynamics in the development of humanity and agriculture. Chestnut Ridge, NY. www.pfeiffercenter.org

January 19–23: EcoFarm Conference, Pacific Grove, CA

The Biodynamic Association (BDA) will host a full-day biodynamic pre-conference event on January 20 on the theme of “Compost and Soil Health: A Biodynamic Approach.” During the main conference, BDA will hold a biodynamic mixer and be available for questions and conversations in the exhibit tent. This is the premier sustainable agriculture conference on the West Coast. Pacific Grove, CA. www.eco-farm.org/conference

January 27–30: Southern SAWG Conference, Lexington, KY

SAWG's (Sustainable Agriculture Working Group) Twenty-Fifth Annual Practical Tools and Solutions for Sustaining Family Farms Conference, 2016. Outstanding practical information and networking opportunities in the sustainable agriculture. The event draws over 1,000 farmers and local food advocates from across the nation. www.sawg.org/january-2016-conference

February 25–27: MOSES Conference, La Crosse, WI

Twenty-seventh annual MOSES (Midwest Organic and Sustainable Education Service) Conference. To be held in La Crosse, WI; info at www.mosesorganic.org/conference/

March 31–April 1: The Spirit of Sustainable Agriculture Conference at Harvard

This conference brings together farmers, religious and spiritual leaders, and academics to join in a robust and stimulating discussion about the spirit of sustainable agriculture, delineating its past, celebrating and investigating its present and theorizing its future. Keynote addresses by Winona LaDuke of the White Earth Land Recovery Project and Nigel Savage of Hazon Harvard Divinity School, Cambridge, MA. Co-sponsored by BDA. Info at www.projects.iq.harvard.edu/spirit_of_sustainable_agriculture/home

ONGOING

Chesapeake Biodynamic Network (CBDN), College Park, MD

Meetings, networking, *Agriculture Course* study and biodynamic workshops held monthly on Saturdays at the Christian Community Garden Grounds next to the University of Maryland at 4221 Metzert Rd in College Park, MD. Contact Michael Judge for the schedule at mjudge2000@gmail.com.

White Rose Farm, Taneytown, MD

Educational food and farm events, festivals, celebrations and biodynamic farm days. For details, please visit www.whiterosefarm.com

Spikenard Farm Honeybee Sanctuary, Floyd, VA

Classes in sustainable beekeeping and biodynamics. Apprenticeship/internship opportunities. Please visit www.spikenardfarm.org

The Fellowship of Preparation Makers Conference: February 18–21, 2016

Frey Vineyards and Biodynamic Association of Northern California (BDANC) will host the fourteenth annual Fellowship of Preparation Makers Conference this year at Frey Vineyards in Redwood Valley in Northern California. The conference is co-sponsored by Josephine Porter Institute for Applied Biodynamics, Inc. and the Biodynamic Association. The theme for this year's event is “Making visible formative forces within substance” and will use BD #500 (horn manure) as a basis for study.

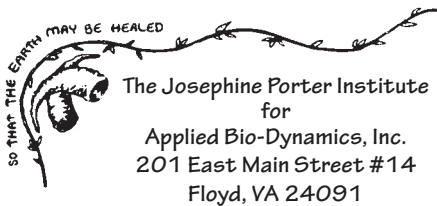
The Fellowship of Preparation Makers (FOPM) is an informal, vital and growing group that has emerged in the cultural/spiritual sphere of biodynamic agriculture. The Fellowship began its work with a conference in Copake, New York in 2002, and has held annual conferences in various locations around North America since then. These conferences have focused on intensive study and discussion of the biodynamic preparations and have strengthened the preparation making community. The mission of FOPM is to help ensure there are enough high quality biodynamic preparations available in North America into the future.

Utilizing BD #500 (horn manure) as a basis for study, conference participants, led by a variety of speakers in the biodynamic community, will examine these questions in a series of lectures, hands on demonstrations and collegial discussions. Invited speakers for the event include Bruno Follador of The Nature Institute; Barry Lia, PhD, of Lia BD Consulting, Robert Karp, Co-Director of the Biodynamic Association, and Jim Fullmer, Co-Director of Demeter USA.

Conference schedule, registration, venue and lodging information can be found on the BDANC website: www.bdanc.org; further information is also available by contacting Pat Frazier at ppfarminfo@paonia.com.

“The men of our time are altogether unaware how the minutest quantities will often work with great intensity, precisely where living things are concerned”

Rudolf Steiner, *Agriculture Course*, p. 90 (Adams translation)



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