



*Building a compost pile (All photos courtesy of the Pfeiffer Center)*

## For the Earth as for Human Beings: Mac Mead on Making the Biodynamic Preparations

*Karen Davis-Brown*

Mac Mead has been the Program Director of the Pfeiffer Center in Spring Valley, New York, since 2007, and a leader and mentor for the North American biodynamic community for many years. He was interviewed as part of the Fellowship of Preparation Makers Interview Project by Brian Wickert of Viroqua, Wisconsin, Fall 2018. The following is abstracted from a summary of a recorded interview. The complete summary is available on the Fellowship of Preparation Makers webpage of the Biodynamic Association website (<https://www.biodynamics.com/fellowship-preparation-makers>). This summary and abstract are structured using the questions developed by the Fellowship of Preparation Makers Interview Project Committee for all interviewees.

*How has your preparation making changed over the years? What insights have come to you as your preparation making has evolved?*

I think you have to pair preparation making with using them. They have been inseparable for me. You are making them, and you are using them, and that is how you learn.

Personally, I think it is important to pursue some kind of knowledge, be it written or oral—conversations with other people—just to get different perspectives. And then to observe. Spray a field and then go back later and look at it. You notice things. You put preparations in a compost pile or on the field, and you notice something.

For me, what changed is more an inner knowledge. I find when you see the preparations and use them, all of a sudden something will click, you will have an “aha” experience. An example is that I mentally wrestled with why **yarrow** blossoms in a stag bladder. Then one day, standing there in a yarrow patch, is a full raked stag looking at me; For me, that was confirmation of yarrow and the bladder. It was like, someone granted me the privilege to have this strong experience. I just stood there for twenty minutes.

For me, the stag has the same stature as the yarrow does. Yarrow has stature; a stag has stature that is similar. Then you read about the preparation, how it seems to create this quality that can radiate through a pile as big as a house. You

can experience that power. Sometimes you can be studying or reading, and you have that special experience.

**Chamomile** is a similar preparation for me. It balances against the harmful effects of “fructification”—lettuce or spinach bolting, the harmful effects of going to seed so things get bitter and tough. The chamomile supposedly balances this. Going from foliage and leaf to seed, you are talking about going from cool, moist to warm, dry. In our climate, this occurs in the middle of May. Here chamomile flowers in mid-May, in this balance time between cool and warm, wet and dry, and so chamomile has this little signature as a plant. And, Steiner gives us the indication that you should bury it where the snow stays the longest and where the sun hits, right? That is your cool, wet and warm, dry. Picture a chamomile blossom, yellow center, a field of white petals. That is the sun on the snow.

The other thing I realized the more I worked with the preparations is that we are actually nourishing elemental beings in different ways with different preparations.

For instance, *valerian* is related to phosphorus and

warmth and helps create a sheath of warmth for the compost pile. In orcharding, valerian is used to help protect against frost during blossom times. At one point, we bought the neighbor’s farm with ten to twelve acres of apples. It was bloom time and we were expecting 27–28 degrees. I stirred valerian in the late afternoon and drove through the orchard with a spray gun attached to the safety roll bar of the tractor, just spraying straight up in the air in between the rows. Next morning, I found out it just went down to 32. My experience was, ah ha, I am working with warmth spirits with valerian, I am working with fire spirits.

A very important thing that has changed for me is that, when I first started making the preparations, we had no animals here at the Fellowship. I had this question of how true is it at the beginning of Lecture Two that it makes an enormous difference that the animals, for your fertility, are on your own farm? What is the difference between a local home sourced manure versus trucked in?

It was buying the neighbor’s farm in 1997 that gave us a



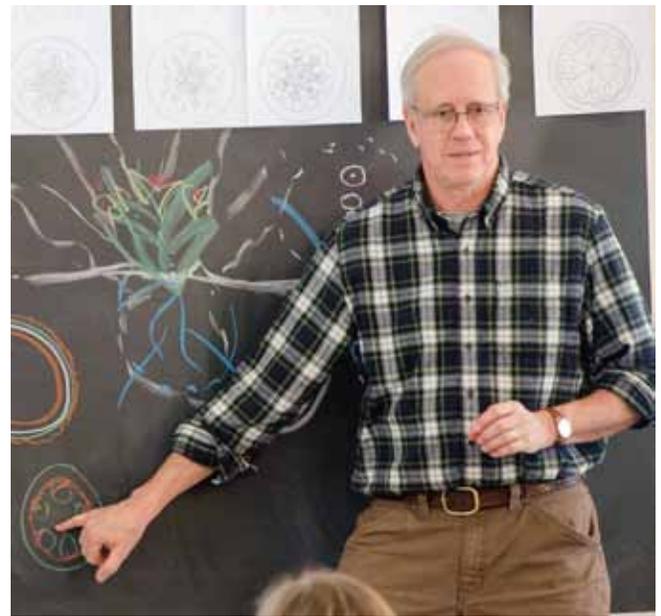
*Students putting preparations in a completed compost pile*

possibility to get some larger animals. We started with one heifer from Seven Stars Farm. We brought it to our farm in the middle of March and there was some green grass. And, what does it do? It does not look at the grass at all, it goes to the dirt around a fence post and starts eating the dirt. Then someone drives up with a tractor, and the calf starts licking the dirt on the tires. After about half an hour, it started nibbling some grass. It took me a day or two to realize that this animal wants our biology, wants our farm in her. Whatever it is in her gut, from now on she is going to be *our* soil improver.

After a few years, we stopped hauling in manures. We were getting compost out to the fields, but, we do not have the volume of manure to do every field every year. At one point I have a field that I had been farming with rotations of various vegetables three or four times over twenty-five years. The only difference is that the preceding fall we had put on this home-sourced compost. The vitality of those vegetables took an enormous leap. You could see it in their form, their color, their vigor, and it struck home to me that the heart of biodynamics is the self-contained farm organism, the farm individuality. That is what biodynamics is, and the preparations refine that. They educate the manure. They enhance the quality of your compost, manures or your field, but the main heart of biodynamics is the farm individuality, the contained organism.

The importance of the preparations has not declined for me. The nettle, the blossoms, the skull and the horns, they each have their nuance. If you look at the preparations, they are made from all these different aspects of a whole landscape. The crystal from the mountain, the oak bark from the forest, the yarrow from the meadow, chamomile from the garden, dandelion from all over the place, the equisetum from the swampy, wet. To have been in the same place for forty years and watch it gradually unfold from a three-acre garden to a 40-acre mixed farm with dairy, it is a thrill. *What unique techniques in making preparations have you adopted, that you feel may be useful to others?*

When I started at the Pfeiffer Center ten years ago, I began working with a suggestion by Steiner that the sun is different in each zodiacal sign. In the second week in September, or so, the sun goes into the earth sign Virgo. I am talking about the actual constellation, not the astrological one. I think it is the longest sign in the sky, and lasts for the whole second half of September, all of October, and the first few days of November. It strikes me that horn manure (500) should experience as much of that time in the earth as possible, since it is a preparation for the earth. For three years we buried horns in mid-September and horns in mid-October, and for three years we got 100% trans-



Mac teaching students about Preparation 501

formation of the September horns -- a nice dark brown, neutral or woody smell. With the October horns it varied but we were getting maybe 70% or 65% transformation. Sometimes we put them back in for a while, but we got the same result basically for three years. So now we just bury all our horns in mid-September, and then we do a bunch for the festival on September 29. I also experimented with depth and with locations. We found some differences, but the real difference was time of burial and the sun.

Another variation we do is with the 501. We do the usual grinding of quartz crystals into a powder. The variation we do is one that Wali Via suggested to me. There is an indication that Steiner has in his footnotes about adding soil into the mix, soil from your fields. So, I like to do that. We often have samples from doing soil tests, and we take these soil samples, mix them together, mill them a bit to get them a little fine and we might screen them a little. We use Wali's recipe, which is one third field soil, one third sand from your farm, and one third powdered quartz. We screen it and we pack the horn with that mix. We spray both the regular 501 and this.

With **yarrow**, our variation relates to the question whether you use dry blossoms from the previous year and get the bladder up early in the summer, or wait until the blossoms are fresh, which here is early July. We have done some trials with bladders stuffed in early June with dry blossoms from the previous year moistened with yarrow leaf tea before putting them in the bladder. And we have stuffed the bladder with fresh blossoms in early July—a month later—and hung them. Both times they were hung

in the sun in the summer in the same place, and we buried them in the same pit but we put little dividers between the bladders so we can dig them up and tell whether they are from the dried blossoms or from the fresh. How do you measure the difference is an age-old question, how to measure quality in preparations. But, just looking at it and a kind of gut impression is that I like the ones from the fresh blossoms. The finished preparation seems to have a little more vitality to it.

For **dandelions**, we use the mesentery as opposed to the peritoneum. One experience I had was when we were able to work with a freshly slaughtered cow carcass. The mesentery, the layer between the two, was filled with warm yellow fat, so we peeled the mesentery layers apart and we scooped out this yellow fat. For me, when I see yellow dandelion blossoms in the spring—you go through a cold winter and the snow and all of a sudden you see these cheery yellow blossoms—I had this image of this yellow fat going into yellow blossoms.

We tend to sew it. Instead of just folding it over and then tying a string around it, we actually use needle and thread and sew it like a sock. You get a lot of blossoms in there and can pack it real tight.

The other thing is the **peppers**. I am into the peppers; I always have been. I feel they are very important, an underused thing that takes commitment and attention. I have seen them be very effective, but it is a long-range approach. Sometimes they work quickly, sometimes they do not work at all. You are not going to eliminate the weeds, but you are going to take the pressure off. It knocks the reproductive capacity out of them. They will not be as vibrant; they will not be as competitive. And then insects, I have seen great results. Some insects are more pernicious, so it is not as effective. For some, though, it is quite effective. I have kids who grew up farming with me who went on to farm or apprentice on other farms, and they will call me up and say, “What the hell are all these bugs? I have hardly even seen these bugs.” Some pests we cannot find any more, so we cannot pepper them.

*Has your work with the preparations changed your perspective in life? If so, how?*

When you meditate you experience pure joy, an inner light. Where does that come from? When I saw those vegetables I described to you after we finally got home-sourced cow manure treated with the preparations, when I saw the radiance and vibrance of those vegetables, I thought, “This is not what is sitting in the soil there, it is something that is shining through there. I wonder if that is the same thing that is shining through in meditation? Is there a center, a healing, light-filled center that we can access through meditation?

Does the earth have a similar light-filled, healing center that can shine through biodynamics?” That is from working with and using the preparations, and just seeing their effect. You spray 501 and you see the plants change. What is going on there?

The other thing, along the same line, is that if there is such a thing as karma and reincarnation—that we have been here before and we are going to have other lives, that we have played a role in choosing where we are, who we are with, what we are doing. For me what that means is I have to wake up to where I am, who I am with, what I am doing. I should learn from what I am doing. I should learn from who is around me. I should have gratitude, appreciation. I should be able to absorb what is around me but also give back to what is around me. We are growing together, we have some time of destiny together, we should help each other.

When you read the qualities of each preparation, what each compost preparation does—look at the **yarrow**, it brings a radiance; it brings an energy, a quickness and mobility into the soil, to your crops. **Chamomile** brings vitality; it brings balance, it brings harmony. **Nettle** brings intelligence; it brings a sensitivity to your compost, to your soil and to your plants. It makes the soil able to individualize itself according to what crops are there. For me, that may be how to speak of the soil and how you give what is needed. If you have intelligent soil it can change, it can give to the peas and the next year it can be the right thing for the potatoes. **Oak bark** creates a harmonious beautiful balance that can help with the diseases, but it is the **dandelion** Steiner says makes the plants more sensitive, more able to get what they need and draw from their environment, even from the meadow or forest nearby. The soil and plants get what they need from the environment. And the **valerian** goes onto the light and warmth, providing that for an environment.

For me, those qualities in plants and soils are what the human beings should have. I would call them “karmic qualities”—to be aware, awake, sensitive, take in what is around you and give what is needed. So, you are in a conversation where it is maybe appropriate to say nothing, or it may be appropriate to say this or that. It is a give and take. The whole thing is giving and taking; that is what being human is. That is what the preparations are all about: they are trying to teach the soil how to give and the plants how to take. This is a nutrition that is way beyond vitamins and omegas, this or that carbohydrate. You try to instill in plants what would make people more human and help them to grow and develop into human beings. The whole exercise of doing all of this through meticulous biodynamics—what you have got to go through to make preparations and use them. You have to work in community; you have to work

with other people, so it is on and on, the social value of biodynamics. That is the deep insight from which I work—that we are doing for the earth what we are trying to do for human beings. It's all part of growth and development.

*What questions, comments, or concerns do you have for the preparation making community?*

I love what you guys, what the Fellowship of Preparation Makers is doing. There is a whole being of the preparations that needs fostering.

And, gratitude to all those people on the other side of

the threshold that have helped bring biodynamics and preparation making as far as it has come. They are around, they are supporting, they are rooting for us. I will say with great gratitude that my primary mentors were coworkers with Ehrenfried Pfeiffer. My main teacher was Evelyn Gregg. Other mentors were Dr. Paul Scharff, Peter Escher, Howland Vibber, Erica Sabarth, Margaret Selke, Willi Ringwald, John Hoffman, my wife Ellen Mead, and, last but not least, Rudolf Steiner.

### Did You Know?

- **According to a report by botany.one**, larger apples have lower natural defenses against pests. The site notes that crops have altered dramatically since their wild ancestors fed humans. To test whether the allocation of resources to produce yield altered a plant's investment in defense, scientists researched fruit chemical defense traits and herbivore resistance across 52 wild and 56 domesticated apples. They found that such trade-offs do exist but called for further research.
- **The United Nations affiliated group**, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released a report in May that cited a million species threatened by extinction. Compiled by 145 authors from 50 countries over three years. Sourced not only from government records, it also included contributions of knowledge from indigenous and local communities. The report notes the need for “transformative changes” across economic, social, political, and technological arenas. The report also notes the top drivers of this degradation as (1) changes in land and sea use; (2) direct exploitation of organisms; (3) climate change; (4) pollution and (5) invasive alien species.
- **In May, the *Smithsonian* covered Civil War plant remedies** that fought off infections. Researchers tested the antimicrobial properties of plants mentioned by surgeon and botanist Francis Porcher. Porcher mentioned white oak and tulip poplar, as well as devil's walking stick. Researchers took extracts from the plants and tested them on three types of bacteria commonly found in wound infections. The plants did not totally kill the bacteria but inhibited its growth, likely allowing the body's immune processes to continue the work of healing.
- **In July, a team of international scientists reported finding evidence of Earth's last polar reversal** in the tree rings of an ancient New Zealand kauri tree. Measuring 2.5 meters in diameter it is one of the oldest tree fossils ever found, having been uncovered during excavations for a geothermal power plant expansion project. Carbon research dates the living tree to between 41,000 and 42,500 years ago. The tree shows evidence of magnetic north and south trading places ([i.suff.com.nz](http://i.suff.com.nz)).
- **A June report in *Scientific American* looked at San Francisco's vanished waterways**, noting that the drive to create cities and towns have altered clues to former natural landscapes. Nevertheless, signs of vanished waters continue to show up, creating seasonal “ghost creeks” running through basements. With cities funneling runoff into green infrastructure such as permeable pavements and ditches containing water loving plants, the San Francisco Estuary Institute proposes redesigning cities to prepare for larger rainstorms and longer droughts and heat waves. An ecologist with the institute notes “Otherwise our cities are brittle and actually multiply the intensity of environmental catastrophes.”
- **A river in New Zealand**, the Whanganui, has been given the same legal rights given to people. The river joins other entities such as the Ganges that have received such legal protections, as reported in the May 2019 issue of *National Geographic*.
- **According to [undergroundreporter.org](http://undergroundreporter.org), the Government of Bolivia** intends to be food independent by 2020. To accomplish this, it has invested \$40 million in small farm food production. The Bolivian government believes that enhancing local capacities is key to reaching its goal, and currently has 20 food security projects underway, ranging from livestock breeding to production of food crops like potatoes, vegetables, and coffee. Since 2014, Bolivia reports a food production increase of 25 percent.