# News from the Institute

## Tending the Roots of Sustainability

# The Significance of Experience-based Learning and Our Responsibility to Children and the Earth

Twenty educators from the US, India, and South Africa joined us for this week-long intensive in June. Here are some comments from the educators who attended:

"This week has been an incredible gift, one that held unexpected treasures, connections and experiences. I felt a need for deeper knowing at the start, 'tools' to take back to the 'real world', but am leaving with a stronger sense of questioning, the importance of dwelling and the time needed for reflection. My inner turbulence has been given new direction and affirmation of the need to return to the curious state of thinking like a child, doing, feeling and sensing rather than thinking what comes next. The course provided a wonderful balance of structure and fluidity, content and experience, silence and conversation. I feel this is the start of a very important 'Experience Continuum' that I hope will continue to weave others into the journey."

"The course was outstanding in all regards. I deeply appreciated the "lessons" because not only were they relevant to learning how to design lessons to invite students into a relationship with the natural world, but they were conducted in the teaching style which allows for the development of attention and the lasting and true relationship with that which is being observed. So many teacher development courses are done in a lecture style which is *not* what will be effective with the students or the teachers!"



"A great experience! I look forward to reviewing and sharing with my colleagues. I am tired and renewed simultaneously. Thank you so much for sharing and allowing us to share."





### Fall at The Nature Institute

In addition to our ongoing research, writing, and topicbased meetings and colloquia, we offered a few public events at the Institute this fall.

- On September 30 Craig gave a talk on "Truth, Beauty, and Goodness." On the following day, Henrike and he led an all-day workshop on "Living in Our Senses." Each year at this time we make such an event a free offering to the local community.
- On October 11 we screened the film "Just Eat It: A Food Waste Story." This was part of a collaboration between the Institute and the neighboring Hawthorne Valley Association aimed at broadly rethinking compost and waste management. Bruno Follador led a conversation after the film.
- October 19 Craig gave a talk with slides that honored the work of the painter Franz Marc and his intention to bring the being of animals to expression. Marc once wrote: "How does a horse, or an eagle, or a deer, or a dog see the world? How miserably soulless is our convention of placing animals in the landscape as we perceive it, rather than seeking to penetrate the soul of the animal so as to glean something of its own world of images." Franz Marc died one hundred years ago at the age of 36 in World War I.

## Out and About

- In June, Craig traveled to the Land Institute in Kansas. He had been invited by Wes Jackson, the Land Institute's now-retired director, to be one of twelve founding core faculty members for a new effort to develop a transformative, transdisciplinary curriculum for higher education. For two intense days, the core faculty members—primarily university and college professors—were joined by about fifteen other individuals to discuss "Ecosphere Studies." There was much exchange about what may be missing from conventional environmental studies courses, and what is needed to bring about educational experiences that are more fully integrative and holistic.
- The first two weeks of July found Henrike and Craig teaching a course, "Seeing Nature Whole," in Florianopolis, Brazil. The course was attended by 25 people who work in a variety of professions (e.g., educators, consultants and health care providers). Evidently the announcement of the course struck a chord, since the Sagres Association, which offered the course, had 32 people on the waiting list. The course is an introduction to the epistemology and practice of Goethean science. This year we focused on projective geometry and

- plant study, all the while considering how we can expand our ways of knowing to come to a more whole and living understanding of ourselves and the world. It was an intense work over the two weeks and we are looking forward to continuing the work with the same group next July.
- Bruno has been active working with farms to improve their composting, land use, and cultural practices, and also giving workshops. In addition to working with farms in our area, he has traveled widely. He was in France in May to consult at Biodynamie (Biodynamic) Services, and in mid-September he went to Vera Cruz, Mexico, to consult at the biodynamic Cafetal El Equimite. There he also gave a public workshop to local farmers on "More Humus, More Humanity: Biodynamic Compost and Soil Health." In July he gave a talk on "The Possibility of a Science of Qualities" at the fifth Regional Anthroposophical Medical Congress of Zona da Mata, in Juiz de Fora, Brazil, and participated in a round table discussion about "Soil and Human Health." In October he gave a weekend workshop at the Josephine Porter Institute for Applied BioDynamics, Virginia, on "Practices and Insights of Biodynamic Composting: Developing Dynamic Ways of Seeing and Working with Compost and Ehrenfried Pfeiffer's Chromatography."

#### Still Ahead

- In November Bruno will be presenting at the National Biodynamic Conference in Santa Fe, New Mexico. He will be one of the presenters at the pre-conference workshop "Bridging the Americas." He will also give a workshop on "Experiencing Soil and Compost through Color, Form and Pattern," and he will be part of a Q&A session on "Biodynamic Composting and Preparation Making."
- Craig will travel to California and present at "From Phenomena to Insight," a conference for high school and middle school science teachers from February 21 25.
- On March 17 19, Henrike and Marisha Plotnik will offer a weekend "Mathematics Alive!" workshop at The Nature Institute for teachers. The focus will be on algebra and geometry in the middle school.
- In April, Craig and Henrike will spend a good part of the month teaching in Australia. Craig will give talks and workshops in Sydney. Then Craig and Henrike will give courses at week-long conferences for science and math educators in Mullimbimby and in Perth.

For a notice about our **2017 Winter Course**, see the back cover

## A New Collaboration: The Evolving Science Association

The Myrin Institute of Great Barrington, Massachusetts, and The Nature Institute have joined forces in a new, collaborative enterprise called the Evolving Science Association. The organizations have jointly resolved to

promote holistic scientific practice that is receptive to the manifold voices of nature in all their variety. Such an evolution of science involves the development of human capacities through which we discover ourselves in nature and nature in ourselves. This enables us to rise above both materialism and the temptation to treat natural phenomena merely as occasions for manipulation. Building on the achievements of both organizations and the synergies of collaboration, the Association aims to strengthen the foundations of holistic knowing and to expand its reach into broader culture.

The Myrin Institute, the original publisher of *Orion*, is a nonprofit organization founded in 1953 by H. A. W. Myrin, an international businessman and humanitarian, and Franz E. Winkler, a physician and author. It began as a forum in which scientists, educators, political leaders, economists, and

religious leaders could exchange views on matters of current interest and offer constructive criticism of each others' initiatives. Its current activities are rooted in the belief that "a genuine reconciliation of the modern scientific attitude with a spiritual world concept is by far the most essential need of modern man. Such a reconciliation will open the way for a philosophy of human freedom which is the safest protection against destructive ideologies and our only valid hope for lasting peace."

The Evolving Science Association will, among other things, pursue publications, conferences, fundamental research, and the training of young researchers. Program decisions will be made by the four members of the Association. The members from the Myrin Institute are George Russell, an emeritus professor of biology with forty-five years of teaching experience at Adelphi University on Long Island, New York, and Mark Gardner, an independent researcher and student of the history and philosophy of science. The Nature Institute is represented by its director, Craig Holdrege, and senior researcher Stephen L. Talbott.

## In France: The Science of Soil Improvement

This past May Bruno Follador spent time in Château, France, a town in the wine-growing region of Burgundy. While there, he gave a public workshop on "Practices and Insights of Biodynamic Composting: Developing Dynamic Ways of Seeing and Working with Compost." Among other things, the participants worked with chromatograms intended to bring out features of soil or compost. This particular form of chromatography was pioneered by the soil scientist, Ehrenfried Pfeiffer. Chromatography offers a fresh and engaging possibility for farmers and gardeners to learn more about the biological processes taking place in their compost piles and fields.

As part of the Living Soils project, The Nature Institute has established a small laboratory for employing Pfeiffer's Chromatography in support of research, workshops, and consultations.



While in Château, Bruno also consulted with Biodynamie (Biodynamic) Services, an organization supporting biodynamic farmers and gardeners, particularly through their work with the biodynamic preparations. After this, he led a workshop at a neighboring farm for the students of the French biodynamic training school.

