

2017 Farmers Course

Numerous times I have seen a bumper sticker that reads: “No Farms, No Food.” Yes, but we need to recognize farms as more than places where food is produced. The translation of the word “farmer” in my native Portuguese is “agri-culturalist.”

In this light, there could be other bumper stickers that say: “No Farms, No Culture”; “No Farms, No Landscapes”; “No Farms, No Communities”; “No Farmers, No to the Possibility of the Health of the Earth and Ourselves.” As Rudolf Steiner pointed out in his 1924 lectures, *The Spiritual Foundations for the Renewal of Agriculture*, there is practically no field of human endeavor that does not relate to agriculture in some way. Seen from whatever perspective you choose, agriculture touches on every single aspect of human life.

When farmers come to The Nature Institute, their presence fills the space with a special mood. The character of their handshake, the quality of their pace, the special feel of their humor and deep thought-fullness—these bring a unique quality to their conversation and participation in our courses.

Each February since 2009, The Nature Institute has offered a week-long course for farmers, gardeners, apprentices, and others who love the land. These intensives focus on honing observational skills and on developing capacities of flexible thinking and discernment. Together with participants we pursue a qualitative, phenomenological method as a contemplative practice. In these courses we explore topics that pertain directly to nature and agriculture: plant growth, metamorphosis, and ecology; the cycle of the year

and astronomy; the whole-organism biology of animals; domestication in plants and animals; the qualities of the four elements (earth, water, air, and fire); evolution and human responsibility.

This past February twenty-two farmers and apprentices came to our Winter Course from local farms as well as Virginia, Vermont, Pennsylvania, Peru, and Canada. The theme this year was “Developing a Qualitative Understanding of Nature: Animals, Humanity and Evolution.” Along with Craig, Henrike, and Bruno they explored:

- Exercises in flexible thinking through geometry
- Mineral, plant, and animal: different ways of being-in-the world
- Wild and domesticated animals
- Animalness and humanness in evolution
- Hands-on activities related to morning sessions
- Observing farm animals (at neighboring Hawthorne Valley Farm)
- Astronomy: daily and yearly rhythms of sun, moon, and stars

Last, but not least—thanks to our new Program Coordinator, Seth Jordan—for the first time this year we started each day with group singing. This brought a delightful quality to the whole week, especially as our voices grew together with time.

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Some Comments from Farmers Course Participants

“I appreciated that you did not just present information that can be found on the Internet or in a book ... but guided us into a new way of thinking.” (Apprentice)

“I enjoyed the holistic approach to learning, where activity and observation are included in the process.” (Apprentice)

“Every aspect of the course was woven into the other. Learning about how we as humans see and think of the world was magnified. We were reminded of our responsibility on Earth; of our freedom.” (Apprentice)

“The animal and manuring elements of the course were insightful and expansive in the context of my agricultural conceptions, and have already proven valuable in understanding practical reality of both domestic and wild animals and our role as ‘husbands’ of the natural world.” (Farmer)

Our New Fellowship Program

As winter draws to a close, we are looking forward to the springtime arrival of six participants in our new Fellowship Program. This year’s fellows hail from all over the world: India, Argentina, Scotland, and France.

The purpose of the program is to give individuals the opportunity to deepen their understanding and practice of holistic phenomenological science. Fellows are given room and board as well as space at the Institute to do their work. They will also be given guidance and support, in the form of educational seminars and regular meetings with Institute staff, as they pursue their own research projects.

This year’s projects will focus on plants; soil fertility and nutrition; the study of landscape; and the dynamic morphology of fish. Fellows will be at The Nature Institute beginning in mid-May and, depending on the individual, will continue through the summer for terms of varying length.

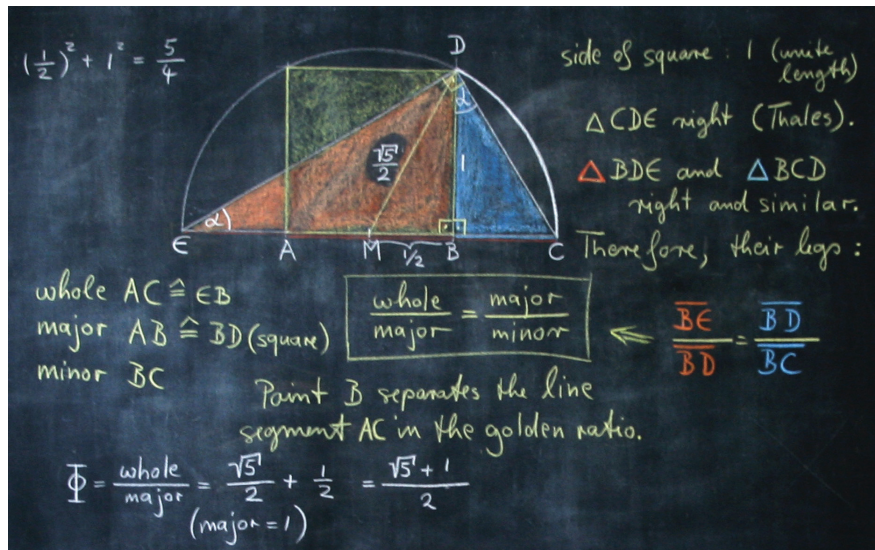
Mathematics Alive!

From March 17–19, for the seventh time, The Nature Institute offered *Mathematics Alive!*, a weekend workshop for middle school teachers. Henrike Holdrege, together with Marisha Plotnik, who teaches math in middle and high school at the Rudolf Steiner School in Manhattan, New York, led a group of eleven teachers from schools in Maine, Washington D.C., Pennsylvania, Vermont, Massachusetts, and New York. This year's topic was "Pentagon, Pentagram, and the Golden Mean." Here are some comments from course participants' evaluations:

"I am planning to re-vamp my entire seventh grade math skills plan, thanks to your gentle, profound guidance." — "My experience is that this collegial work is very supportive and nourishing. Since this work is a process, it never gets old or finished. I appreciated the balance of moving, making (geometric) constructions, and algebra. What I have learned and re-experienced here will inform my teaching and, with my colleagues, help our school's math program. Because you bring math topics in experiential as well as cognitive ways, I look forward to any topic." — "I am planning to use all of this (well, much of it) with an eighth grade skills class as a 'capstone' experience to end their year." — "I admire the fruit of different perspectives coupled with the respect for different approaches. Working with the (geometric) forms enables me to enhance my traditional training that focused more on number and formula. I greatly appreciate the many angles from which we viewed the topic."

Over the years, *Mathematics Alive!* has covered a wide range of topics, including Euclidian geometry embedded in form drawing and movement; various proofs for the theorem of Pythagoras; negative numbers and their arithmetic; introducing algebra and discovering algebraic rules; solving linear equations based on the child's previous experiences in arithmetic; the platonic solids; and irrational numbers. All these topics are part of most schools' math curriculum. In the foreground of our work are these questions: Can the student at the onset of puberty be supported in her or his healthy development by practicing and engaging in math? Can doing math further the human capacity for discernment between true and false? Can math be more than drill and a mere set of rules that require the student to learn them by heart and to apply them? Can math, rather, be present in the classroom in its greater fullness?

Before a teacher can bring greater fullness of math into a classroom, obviously, that fullness has to live in the teacher.



Often our own schooling and higher education in math did not provide that fullness. Therefore, we as adults engage in learning, sharing, and working together during the weekends of *Mathematics Alive!* at The Nature Institute in order to bring the topics to life in our own experience. HH

Out and About

- When this issue of *In Context* arrives, Craig and Henrike will have returned from their month-long stay in Australia. During April they gave a variety of talks, workshops and classes in Sydney, Tocal, Mullumbimby, and Perth. In the latter two cities, they gave classes for teachers during week-long conferences. Henrike taught math for middle school teachers and also projective geometry. Craig's classes were concerned with evolution.
- In July, Craig and Henrike will be teaching the second part of the two-year program on "Seeing Nature Whole" in Florianopolis, Brazil. The two-week session will focus on color and light, animals, and evolution. The same twenty-five participants who attend last year's session will be coming again to complete the program.
- At the end of November, Bruno gave two workshops at an Ecological Farmers of Ontario (Canada) gathering. He spoke on "Developing Dynamic Ways of Working with Farm-Scale Composting" and on "Practices and Insights of Biodynamic Agriculture." The conference took place in Kingston, Ontario. Afterward, the farmers' organization wrote in their review of the conference, "Follador's presentation was far more than a practical guide to managing compost—it was a kind of sustained reflection on humus infused with poetry, cultural analysis, and an abiding love of the subject."

- In December, Bruno gave one of the keynotes at the third National Mexican Biodynamic Conference, in Coatepec, Veracruz. He spoke about “Soil, Culture, and Human Responsibility.” He also gave a three-day workshop on biodynamic composting practices.
- In January, Bruno gave one of the keynotes at the Utah Farm Conference, held in Cedar City. He spoke on “Soil, Culture, and Human Responsibility” and gave a workshop on “Practices and Insights of Biodynamic Composting.”
- In early February, Bruno gave an invited lecture at the Annual International Conference of the Biodynamic Movement. He spoke on “Experiential Sketches on Fertilizing and Composting” and gave a three-day workshop on “Developing Dynamic Ways of Seeing and Working with Farm-Scale Composting.” The conference took place at the Goetheanum in Dornach, Switzerland.

A New Colleague

Seth Jordan joined us this past November as our part-time Program Coordinator. He is very enthusiastic about supporting our work in Goethean science, as well as exploring how our approach can inform a new impulse in the social sciences.

Seth graduated with a degree in Philosophy from Connecticut College in 2003. In his senior year, he took a seminar on evolution where he learned that nature is a complex, murderous machine — “red in tooth and claw” — but, he adds, “this didn’t seem like it was really the whole picture.” Since that time, his main work has been in educating and organizing. In 2008, he co-founded “Think OutWord,” a peer-led program for young adults exploring possibilities for social change. In the following years, Seth spent much of his time organizing and teaching workshops in the U.S. as well as in Europe and Asia. In 2014, he settled back down in our area as a teacher at Free Columbia.

One of Seth’s first tasks at The Nature Institute has been to manage the daunting organizational and logistical tasks associated with the establishment of our first Fellowship Program. (See separate news item.) The program would have been impossible without his efforts. We are very happy to welcome Seth onto our staff.

New Online Resources

Educating for Sustainability. The Nature Institute is happy to offer a major new online resource that we have created to serve holistic and phenomenological sustainability education. Over the past year we have identified our relevant writings and materials, written a brief synopsis for each, and

then organized them as a guide according to subject matter and also education level (early childhood through postsecondary education).

In addition, we also provide a bibliography of publications by other authors, and links to other organizations offering important resources in sustainability education. Special thanks to our colleague Colleen Cordes for her tireless work on this project.

Please use the resource for your own study and for your work in the classroom. And please share it with anyone who you think might be interested! You can find it on our website at <http://natureinstitute.org/sustain>.

A YouTube Video. At this winter’s week-long Farmers Course, Craig gave an evening talk on the life and work of Franz Marc, the great expressionist painter who worked with tremendous devotion to portray animals as they themselves “see the world and feel their being.”

Craig shared numerous slides of Marc’s work — beginning with his early drawings and paintings (including some fascinating photographs of his work as a young teacher of anatomical drawing), and then tracing his further evolution as an artist, and ending with his powerfully vibrant expressionist works.

We recorded Craig’s presentation and slideshow and have made it available on YouTube and on our website at <http://natureinstitute.org/txt/ch/marc.htm>.



Franz Marc, Foxes, 1913

New Publications

Craig Holdrege: Not long after this newsletter appears, Craig's new monograph on frogs will be published. Appearing in our Nature Institute Perspectives series, the booklet is entitled *Do Frogs Come From Tadpoles? Rethinking Origins in Development and Evolution*. It is published by the Evolving Science Association, a joint venture of the Myrin Institute and The Nature Institute, and, when available, can be purchased from the bookstore on our website.

In this study Craig has brought together and re-worked the three articles on the frog from *In Context* #33, 34, and 35. He shows how the agency of beings is a central force in development and evolution, in contrast to current thinking which treats living beings as effects of mechanisms. He presents key issues of development and evolution through the lens of amphibian ontogeny (development of an individual organism) and phylogeny (evolutionary development of species over time). The result is a concrete example that can be used by educators to introduce a holistic way of viewing evolution.

In describing his undertaking, Craig writes:

In my portrayal of frog and amphibian evolution I have tried to present a picture of evolution as a creative process. In so doing I have consciously avoided a trend of thought and research that is often dominant in the study of the fossil record and evolution. That is the search for ancestors and origins in the fossil record.

The booklet is furnished with many illustrations.

Stephen L. Talbott: A lengthy article by Steve entitled "Evolution and the Purposes of Life" was published in March in *The New Atlantis*, an influential journal devoted to discussions of science, technology, and society. The piece is the initial, and more preparatory, half of a two-part effort to sketch the basic principles of a radical reconceptualization of evolution theory. The decisive element in this reconceptualization is the insistence upon taking organisms seriously as purposive agents in the evolutionary process—this, as opposed to assuming that the "mechanism" of natural selection is the key factor in evolutionary change.

As these words are being written, the Winter 2017 issue of *The New Atlantis* is at the printer and not yet available. We hope to have some news about the reception of the article (which we expect may be a bit stormy!) in the next *In Context*. Meanwhile, you will find a link to the full text of the article at <http://BiologyWorthyofLife.org>.

Also, last autumn the Norwegian publisher, Paradigmeskifte Forlag, released a book consisting of several articles by Steve—"Getting Over the Code Delusion," "The Unbearable Wholeness of Being," "What Do Organisms

Mean?" and "Evolution and the Illusion of Randomness," along with several others. A number of these were previously published in *The New Atlantis*. The book, translated into Norwegian by a good friend of The Nature Institute, Trond Skaftnesmo, is entitled *Å gjenoppdage organismen—fra molekyl til evolusjon*, which translates to "Rediscovering the Organism—From Molecule to Evolution."

And, finally, a translation into Spanish of Steve's Nature Institute Perspectives booklet, *In the Belly of the Beast*, is currently in the works. It is being undertaken by the Colombian scholar, Mauricio Loza.

Bruno Follador: Bruno's article, "The Creature That Has Never Been," which was originally published in the spring 2015 issue of *Biodynamic Journal*, has now been reprinted in *Lilipoh Magazine* vol. 85, no. 21 (fall, 2017). The revised title is "The Creature That Has Never Been: Shifting Our Approach to Livestock — From Machine to Being." And now, in its fall/winter issue, the *Biodynamic Journal* has reprinted Bruno's article from *In Context* #34 (fall, 2015), "Portraying Soils and Compost: Color, Form, and Pattern." Both articles are also available on our website.

A Challenge Grant: Sustaining the Work!

A Nature Institute supporter has generously offered to donate up to \$5,000 as a matching gift to support our work. This issue of *In Context* gives you a window into our intentions and activities.

Whether it is in adult education programs or in publications, we strive to foster an awareness of the deeper nature of nature. This awareness can grow as we become more attentive to concrete appearances and to our own active participation in the world. Can we—instead of fostering division and abstraction—let the connectedness and richness of the world come to ever fuller expression through human activity? That is a striving that motivates our efforts.

Thanks to this challenge grant, every dollar you donate to The Nature Institute by June 30 will be matched, up to \$5,000. You can make a gift by check or credit card using the enclosed envelope, or by credit card through our website (<http://natureinstitute.org/friend>).

Thank You!