



## HEARTS IN THE STREAM: LEARNING TO LEARN FROM NATURE

BY JANICE MOLLOY

“The role of the arts, especially in our increasingly technological culture, is to discover and preserve that way of interconnected thinking. If we forget these other parts of being human—the connection of human life to the life of rocks and trees and animals and weather—then we will lose any sense of proportion about how we ought to be in the universe, amid a wider existence.”

—Jane Hirshfield

**Y**ou are fly fishing, standing knee-deep in the Housotonic River, which tumbles down the western edge of Connecticut. As you cast for the fifth or fiftieth or five hundredth time, a brief movement—a flutter—catches the corner of your eye. You land a Blue Winged Olive gently on the river’s surface, a tempting dish for a passing trout, and then turn to look at what caught your attention. At first, all you see is a branch of fall leaves, hanging gracefully over the riverbank. But on a second glance, you notice that the leaves are too orderly, too connected. Like Tibetan prayer flags or clothes hung out to dry, they flap gently in the breeze. Wading through the water, you find several arrays of maple leaves, strung on reeds and lashed to a low-hanging branch.

You are a hiker, drinking in the September air along the trails of the Cockaponset State Forest with a friend. Deciduous yellows, browns, and reds punctuate the still-green woodland. Late-summer asters glow along the sides of the path. As you cross a bridge spanning a rivulet, your companion pauses to sip

from her water bottle. You wait, and your gaze drifts downward. You are startled to see, scarlet against the dark peat, a set of concentric hearts. Some of the bright berries have drifted in the slight current, blurring the edges, a gentle dance between the direction of a knowing hand and the swamp’s hidden currents.

In September 2009, a group of global environmental leaders gathered at the Trinity Conference Center in West Cornwall, Connecticut, for a five-day workshop. Arriving from locales as distant as Brazil and Indonesia and as close as nearby New England states, the 14 participants were alumni of the Donella Meadows Leadership Fellows Program, run by the Vermont-based Sustainability Institute.

Donella (Dana) Meadows was the lead author of the 1972 book, *The Limits to Growth*, which rocked readers with its exploration of the pending collision between a rapidly growing population and a world with finite resources. An important early voice of insight and innovation on the environment, Dana went on to found the Sustainability Institute; teach generations of students at Dartmouth College; receive a MacArthur “Genius” award; and write a weekly newspaper column, “The Global Citizen.” She also founded Cobb Hill, now a thriving cohousing community and organic farm in Hartland, Vermont.

The Fellows Program was founded after Meadows’ untimely death in 2001 with the goal of ratcheting up the environmental movement by increasing the effectiveness of its up-and-coming leaders. The Fellows—by design, mainly women—work in NGOs, government agencies, philanthropic institutions, and businesses around the globe. They represent organizations that range from large multinational corporations to social and

environmental justice start-ups in developing countries; their areas of focus run the gamut of the pressing issues of our times—forestry, energy, food production and farming, economic development, ocean conservation, pollution prevention, health and safety.

### Three Skill Sets

Over the course of the two-year program, Sustainability Institute staff and outside instructors train and coach Fellows in three skill sets: *systems thinking*, *reflective conversation*, and *visioning*. All of Dana Meadows’ work was grounded in systems thinking—the perspective that we can better understand something by looking at it in the context of its relationships rather than in isolation. When people try to solve problems without considering the larger implications of our actions, we can end up creating unintended consequences in other parts of the system—and make the original problem even worse. Valuing synthesis over analysis and holism over reductionism, systems thinking takes literally the well-known Aristotelian edict, “The whole is more than the sum of its parts.”

By balancing attentive listening to others with effective advocacy of one’s own position, the practice of *reflective conversation* serves to gather knowledge from all parts of a system. The goal is to surface insights from those with a wide range of backgrounds and perspectives instead of relying on the limited knowledge of a few.

*Visioning* involves identifying a desired future and using the gap between that vision and current reality to motivate action. By practicing these tools, Fellows gain the ability to tackle seemingly intractable problems and design radical—from the “root”—solutions rather than short-term quick fixes.

### TEAM TIP

Any kind of hands-on, physical modeling activity can help stimulate new thinking.

Now, almost a decade after its launch, the program has 54 alumni. Every two years, a new cohort of 18 to 20 participants gathers at Sustainability Institute for a series of four week-long workshops, with ongoing homework and personal coaching between sessions. During the onsite meetings, Fellows stay with families in the Cobb House cohousing community. To experience living with lower environmental impact and higher levels of mutual dependence, they do chores such as stacking wood for the common furnace and maintaining the community's hilly paths. In the process, the participants form close bonds that result in joint projects, cross-over learning from different sectors and industries, and a support net for when the road feels impossibly long.

Because, as the less-than-promising outcomes of the U.N. Climate Conference Copenhagen showed, the barriers to success for those combating climate change still remain sky high. For the Fellows, these struggles are far from abstract. Each day involves a Sophie's Choice of tradeoffs, of balancing one group's vital needs against another's, of making tough compromises between what is right and what is possible. It can be lonely, wearing work. The alumni workshop in September sought, among other things, to strengthen the ties among people from all of the cohorts, to break through the isolation, to celebrate what has been achieved, and to plant the seeds for future success.

### Leadership Earth Art Project

Knowing the renewing quality of the arts and their possibilities for stimulating new ways of thinking and being, the event's conveners consciously wove visual arts, music, and dance into the program. On the first afternoon, Vermont artist Jay Mead led the group in an activity designed to "help participants experience systems in nature, observe patterns, and work from a creative influence to balance the intellectual." A painter, sculptor, puppeteer, and performance artist, Mead has created environmental art for more than 30 years. He has worked with Bread and Puppet, Cristo, the Puppet Tree, and Wise Fool Puppet Interventions, and has led workshops for learners of all ages.

Mead called the three-hour experience the "Leadership Earth Art Project," or LEAP! As a catalyst for the activity, he introduced the work of British artist Andrew Goldsworthy. Goldsworthy uses natural material, including snow, ice, leaves, bark, rock, clay, stones, feathers, petals, and twigs, to create outdoor sculptures. Some of these are ephemeral—like a glittery star formed from icicles secured in the center by the artist's saliva—while others are more enduring, such as a continuous crack in the courtyard pavers at the M.H. de Young Museum in San Francisco. According to Goldsworthy, "I stop at a place or pick up a material because I feel that there is something to be discovered. Here is where I can learn."

Jay encouraged participants to follow Goldsworthy's lead and learn from the natural landscape by creating their own *in situ* pieces. By working with the right brain rather than just the left, hands and not merely the head, they would practice a mode of thinking and sensing that is different from how we generally interact with the environment. Through this "playful meditation," the goal was for the alumni to discover patterns in nature that reveal larger systems and suggest metaphors for their own life experience, work, and vision.

Mead led the group around their canvas: the Trinity Conference Center's grounds, with its labyrinth and hiking trail through the Cockaponset State Forest and along the bank of the Housatonic River. He showed the group a sample he had created: a set of vertebrae made from stones, white against the crisp fall leaves. This simple artifact echoed the shape and direction of the nearby train track, emphasized the parallels between natural and human-made design solutions.

The Fellows then dispersed, naturally falling into pairs, with a few preferred the reverie of working alone. Their voices joined the soundtrack of rustling leaves, flowing water, and bird songs, set against the Indian-summer sky.

One team created what they called "a spectrum of energy," a wheel of stones and a gradation of fall leaves, moving from green to yellow to red and then to brown. Another pair made crowns, woven from ferns and adorned with flowers, transforming the group

into a tribe of protective wood nymphs. Rolling up their pant legs, two participants waded into the river to construct a sturdy question mark out of river rocks, a dam around which the water eddied and flowed. Some of the installations were kinetic, using the wind and the water for movement; others captured the coiled energy of the spiral; still others reflected the cyclical autumnal shift from abundance to harvest—and the promise of renewal.

After three hours, Jay reeled in the groups for a "gallery walk" of the installations. As they described their work, the artists recounted the pleasure of slowing down, of being in the process rather than focusing on the product, of working with their hands. By using found materials and accentuating what was already there, they moved from viewing nature as an object to considering it a co-conspirator and guide.

### The Ultimate Systems Teacher

As a culture, we spend so much of our effort on combating the forces of nature. We use nails and metals extracted from the earth to erect structures that defy the laws of gravity. We paint and seal to stave off rot and decay. We disregard natural laws like "waste = food" and "there is no away." We treat Earth's rhythms as an obstacle to be surmounted or a problem to be solved.

But what if, even for an afternoon, we could create in accordance with, not in defiance of, the natural systems that we are a part of? What if we were to accept the inevitability that our artifacts will ultimately revert to where they came from, to feed the next cycle, with or without our approval? What if we slowed ourselves to the pace of the river and the forest and the fields? Could we learn to learn from nature, which is, according to Jay Mead, "the ultimate systems teacher"? Would we have the courage to do so?

For at least one group of leaders in the trenches of the sustainability resolution, the answer is decidedly "yes." ■

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*Click here* for a video overview of this art activity.