

Artisanal Soil

Sue Spaid

Associate editor of *Aesthetic Investigations*, **Sue Spaid** recently published *Ecovention Europe: Art to Transform Ecologies, 1957–2017*, her fifth book regarding ecological art. In addition to “A Philosophical Approach for Distinguishing ‘Green Design’ from Environmental Art” in *Advancements in the Philosophy of Design*, her work has appeared in *Philosophica*, *Arte y Filosofía en Arthur Danto*, *The Journal of Somaesthetics*, *The Journal of Aesthetics and Art Criticism*, and *Rivista di Estetica*. Spaid defended her doctoral dissertation “Work and World: On the Philosophy of Curatorial Practice” in 2013.



To emphasize the connection between soil and food, some artists produce artisanal soil, which they typically employ in their artist-farms. Each of these artists has his/her own process and reasons for producing artisanal soil, characterized here as an “artist-initiated process for ameliorating top soil.” To capture the distinctness of approaches devised by ten artists/teams working in the United States and Europe, I offer four artworks for each of three categories: (1) farm chain, (2) regenerative soil as public art, and (3) outdoor studios/experimental farms. Artists who opt to exhibit these practices as their art encourage art institutions and their publics to appreciate soil on par with museum treasures.

Society's Willful Disassociation of Food from Soil

While visiting Roma the first week of January 2015, I accidentally discovered the giant banner slung over the Food and Agriculture Organization's world headquarters announcing the United Nations' "2015 International Year of Soils." I figured that the UN had selected this particular topic to connect with "Feeding the Planet. Energy for Life," the theme of Expo Milano 2015, set to open four months later and welcome 20 million visitors. In my mind, these two events had been devised to pave the way for COP21, that year's pièce de résistance, where 196 parties were expected to meet in Paris to sign the accord committing the world's nations to limit global warming to less than 1.5 degrees Celsius and to achieve zero emissions sometime between 2030 and 2050. As I shall soon describe, none of these events transpired as I envisioned, despite the fact that fully half of the 158 Intended Nationally Determined Contributions (INDCs) drafted ahead of COP21 "ascribed importance to the agricultural sector. In particular, African and Asian countries are aiming for more sustainable uses of soil and land. In fact, soil remained mostly invisible in those contexts."¹

Fully expecting healthy soil to be on the table in May at Expo Milano 2015, I was buffaloeed by national pavilions bent on promoting exotic exports like crocodile burgers from Zimbabwe, and novel technologies such as hydroponics and aquaponics, which offer zero carbon sequestering opportunities. Stranger still, Italy barred the Belgian Pavilion from offering insect tastings to accompany its video installations promoting insect farming as a feasible, "future" protein source, even though "Green Bugs" were already on offer in its national supermarket chain.

Even the massive Pavilion Zero representing the United Nations neglected nutrient-rich soil, as if healthy human diets don't depend on soil (only a handful of pavilions bothered to mention water's crucial role). One possible explanation for this oversight is that in 2012 the United Nations adopted Ban Ki-Moon's "zero hunger challenge," which emphasizes zero loss and zero waste. Worldwide, one-third of all food produced is either wasted due to poor storage facilities (harvests decay before shipment), poor distribution (inadequate roads or unaffordable transportation), or poor management (tossing spoiled food), resulting in a food loss of 1.3 billion tons.² Unfortunately, the UN's zero-waste strategy, which rightly addresses postharvest malfeasance, totally ignores regenerative soil's greater role in stimulating plant growth and sequestering carbon. We need both!

Six months later, I fully expected regenerative soil and carbon sequestration to be central to COP21's agenda as a viable tool for

stabilizing climate change. Once again, soil remained off the table, save for the launch of "4 Pour 1000," an initiative signed by about 60 nongovernmental organizations and nations committed to increasing soil's organic matter by 0.4% each year. I even naively fantasized President Obama springing "regenerative soil" on the nation at the very last minute, during his very last State of the Union address, as part of his administration's strategy for mitigating against climate change.

Apparently, the connection between regenerative soil and climate change is lost on those committed to fixing food storage, distribution, and management, yet agricultural practices contribute up to one-third of the greenhouse gases responsible for exacerbating climate change.³ Moreover, Pavilion Zero's "fix" presumes food production capacities stay the same, but achieving this necessitates farmers' continued access to healthy topsoil, a precious resource that must be locally generated, widely available, and constantly rejuvenated. As long as current trends continue, whereby topsoils are routinely depleted due to overtilling, overgrazing, and overcultivation, and cause wind and water erosion, salinization, and/or loss of organic matter; the planet will heat up and water supplies will dwindle worldwide, as reduced production levels leave fewer rooted plants capable of absorbing and transpiring water.⁴

Artists' Willful Reconnection of Food and Soil

In light of my worry that too few view soil as the "fix," whose greater attention would improve food quality and climate change alike, I now turn to artist-farmers for whom a healthy planet is the cornerstone of their artistic practice, enabling them to demonstrate soil's significance, if not inspire the public to prepare and employ homemade soil by composting table scraps and leaves. For my purposes here, *artisanal soil* is simply some artist-initiated process for ameliorating topsoil. To be clear, most artists discussed here use the "outdoors" as their studio, and then exhibit some aspect of their farm work indoors as art. Most consider farming to be their primary artistic practice.

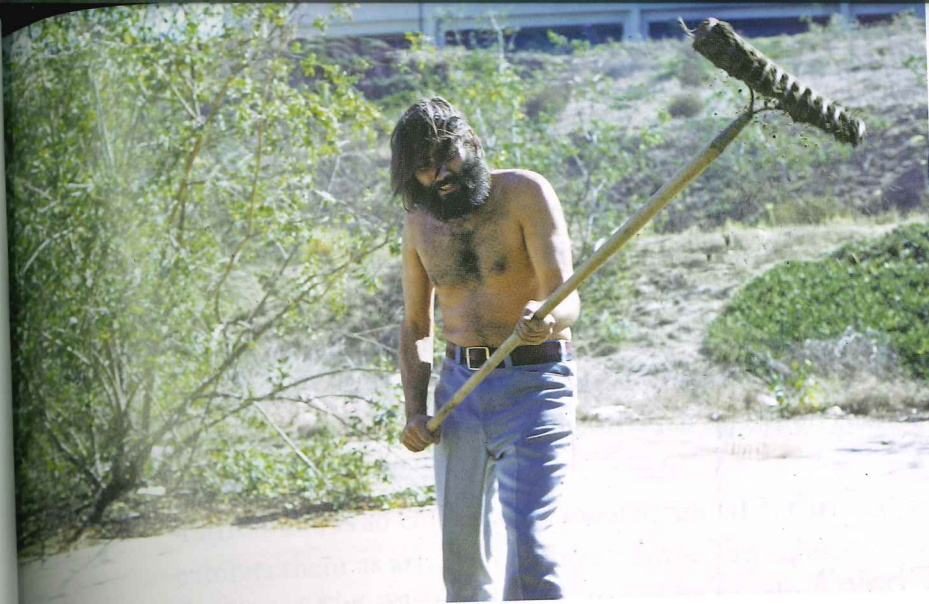
Given the rich history of ameliorative art practices, artists who produce artisanal soils typically view their art as the process itself, not the resulting soil or produce. All artist-farmers depend on rich soil to produce their works, yet only a handful handmake artisanal soil, just as not all painters build their own stretcher bars. What artists call "soil" is likely considered soil amendments among soil scientists. Nonetheless, artists who handmake top soil draw on skills developed by artists over millennia to produce artisanal glazes and paints, and naturalists who cultivated those very flowers that have inspired painters for centuries. A many-layered process,

soil production combines research, good judgment, and the successful implementation of set procedures that enable one to sustainably produce and nourish soil.

While researching *Green Acres: Artists Farming Fields, Greenhouses, and Abandoned Lots*, I noticed that artists-farmers make exceptional farmers precisely because of their art school/studio training, which helps them to develop acute observational skills and a knack for tedious activities, two skills that prove handy for farm work. Artist-farmers tend to approach farming the way fastidious painters approach painting, with great patience, dedication, and focus. Finally, art-farms benefit from artists' analytical skills such as pattern recognition, as well as their capacity to understand and maneuver systems. Even though each artist-farmer recommends a different artisanal recipe for producing homemade amendments, the outcomes are similar: more nutritious, living topsoil, with a greater capacity for carbon sequestration than ordinary soil that is repeatedly exposed to chemical fertilizers and pesticides, and routinely depleted of organic matter.

Because growing plants glean minerals and nutrients from whatever soil they inhabit, knowledgeable farmers must rejuvenate and replenish topsoil, otherwise the nutritional values of fruits and vegetables (grams of available minerals and vitamins) will continue falling far below those provided by produce just 50 years ago.⁵ To remedy this, numerous artist-farmers have developed special strategies for producing artisanal soil "from scratch"; that is, nutritious soils prepared locally by hand with the help of local animals and microorganisms. This approach benefits not only human beings and other animals eating the plants, such as bees and butterflies pollinating them, but billions of microorganisms seeking habitat. Most important, these amendments keep topsoils alive, even in cities, improving their capacity to absorb rather than emit carbon.

Not surprisingly, artist-farmers for whom soil is the bee's knees consider society's willful disassociation of food from soil extremely dangerous. Artisanal soil production is primarily motivated by a preference for nutritious food grown in healthy soil, rather than crafting trends or a desire to optimize fertility. Moreover, these artists deem soil an invaluable *medium*, since it is the mechanical substrate in which plants take root, the supportive environment enabling seeds to absorb nutrients as they grow into plants, and the quintessential material for rainwater absorption and evaporation. Art lovers experiencing art-farms likely focus more on the visible plants than soil's invisible inhabitants, just as people tend to focus more on the overall painting than its less noticeable support mechanisms, but each artist knows deep down what propels plant growth.



Newton Harrison/Harrison Studio, *Making Earth* (raking, digging, eating), 1970.

To better grasp artisanal soil's role as an artistic medium, I divide artists' approaches into three categories. I begin with the most basic example, that of artistic systems that employ natural decay or composting processes to form a "farm chain," engendering enriched soil as a byproduct of food consumption and/or production. I next discuss artists whose public works broadcast the importance of regenerative soil and demonstrate easily implementable ways to avail it. Third, I describe how artists' outdoor studios double as experimental farms, some verging on agronomy labs.

The "Farm Chain"

The artistic effort to reconnect food to soil began with *Making Earth* (1970), an action/performance by artist Newton Harrison. He gathered different kinds of "manure, sewage, sludge, sawdust, vegetable matter, clay and sand, to create seven piles of earth that he watered and worked each day until they smelled so rich that he could put the soil in his mouth."⁶ This action not only sounded alarm bells about society's need to focus on soil, but his handcrafted resource was used expressly to grow nourishing food for a herbivore, whose nontoxic poop he aimed to use to nourish more soil, becoming the first step of the "farm chain." Thus was born *Survival Piece #1* (1971/2012), a sustainable food source for a hog, whose poop was subsequently used to produce more artisanal soil. Harrison next worked with two algologists to grow brine shrimp in open-air tanks, thus providing food for farmed fish, whose fish scraps were served as fertilizer for growing fruits and vegetables. In collaboration with his wife Helen, the Harrison Studio visibly linked pastures to pig poop and shrimp to fish feed, using multiple animal layers to demonstrate the various steps needed to create the "farm chain." Their structures for growing fruits and vegetables eventually necessitated *Worm Farm*, a trough for composting table and garden scraps, which they first exhibited as part of *Full Farm (Condensed)* (1972), their installation of the chain's seven stages.

With *Soil Factory* (1998), N55 provide an easily implemented system for vermicomposting indoors, enabling households and office mates to sharply reduce organic waste. Approximately 1000 worms living in the second module from the top do all of the work as they move through holes from tray to tray. According to N55 cofounder Ion Sørvin, "After approximately 6 months, the material in the lowest tank is transformed into a black, soft substance mostly consisting of worm castings, a large part of which is humus."⁷ N55 recommend using the worm *Eisenia fetida*, since it is among the soil-surface dwelling or compost-preferring species.

In contrast to *Soil Factory*, whose vermicomposting process is opaque, disguised as it is inside a repurposed black filing cabinet, J.J. McCracken proffers an extremely transparent indoor system, whereby people deposit their daily food scraps into gorgeous Plexiglas vermiculture boxes, thus enabling worms to fashion dynamic "functional paintings," befitting of dining rooms everywhere. Her elongated boxes have lids that slide off, enabling everyday eaters to easily insert scraps for the worms residing inside. As contents change and evolve, so do these fascinating "paintings."

Tattfoo Tan is so enthusiastic about artisanal nutrients that he regularly exhibits them as art, even without plants. Tan calls his brand of artisanal fertilizer *S.O.S. Black Gold* (2009), and he prices each 10-oz jar to track the market rate for an ounce of gold, which makes each jar worth \$12,710 at today's gold rate (November 2017). First exhibited at the Bronx River Art Center, his fertilizer contains pure worm casting, the result of his having worked with worms that decomposed food and garden scraps in an undisclosed cellar in a secret location. When farming in his Staten Island garden, he uses *5pm Poop*, chicken manure that he composted with a mix of food scraps and fall leaves and then let sit a year. "It is amazing. So good, my garden now produces so many raspberry and various herbs."⁸

Regenerative Soil as Public Art

For his contribution to the Austrian Pavilion at the 53rd Venice Biennale, Lois Weinberger displayed garden scraps in a blue shed behind the Austrian Pavilion. Regularly gathered from the Giardini, the ever-mounting and shrinking pile was in an ongoing process of becoming soil-enriching compost. His artist's statement accompanying *Laubreise* (Leaves Travel) (2008–2009) captures soil's deep connection to life (and art):

In the dissolved condition of the plant (such that insects are the essence of the blossom), the incomprehensible beauty of nature mutates into a rich ground of sensations. This collapse, an in-between space, produces time, whose arbitrariness is realized through repetition. The space of art reflects the space of the existential—that of "making good soil"—(as a cultural act). In fact something like an alchemistic process happens—leaves travel—into the complexity of the indeterminate. (The engagement with nature finishes at your own body.)⁹

To regenerate the soil of several abandoned Cincinnati lots, Permaganic Co, a nonprofit after-school program cofounded in 2010 by Luke Ebner and his wife Angela Stanbery-Ebner, first added one foot of fresh soil.

Next pages:

Lois Weinberger, *Laubreise*, 2009, Heap of rotting plants, 350 × 250 × 170 cm, Venice Biennial Austrian Pavilion, Venice, IT.

Photography credit: Herta Hurnaus.



Ebner and his team of teen gardeners next created “windrows” (linear piles of biodegradable material) from animal manure and wood chips. To further nourish the soil, they grew basil, “popcorn,” tomatoes, and pumpkins. Twice a year, they flip the soil back on its bed.

Eager to present an artwork related to soil generation for “Green Acres” (2012), Ebner sought a way to capture the deep connection between soils and produce, resulting in *Soil Olympics*, two back-to-back contests between farmers, first in Cincinnati (2012) and then in Arlington, Virginia (2013). After convincing nearly twenty local farmers to participate in his soil competition, he requested them to supply their farm’s prize produce alongside soil samples plus a written list of the soil’s known ingredients, indicating each farmer’s “soil recipe.” He then typed each recipe onto a paper strip, and mounted it onto a wall map with a colored pin. Using the same color yarn, he linked each recipe to a same-colored pin designating that farm’s location on the map. On a long table, he displayed both the soil and resulting produce in hand-blown glass display jars, whose glass lids, entwined in the same-color thread, could be removed for people to experience the relationship between vegetables, legumes, and herbs grown in different soils. Ebner selected soils ranging from local artist-farmers Homestead Song to dead soil found in an abandoned lot, cluttered with rusty nails and concrete chips. As far as I know, no one won a gold medal, but several samples looked quite scary!

An edible garden rooted in permaculture principles, George Mason University’s SoA Green Studio, initiated in 2010 by Mark Cooley, doubles as public art and farm atelier amid a sprawling university campus. This garden hosts medicinal plants, as well as plants particularly beneficial for pollinators, which feed the school’s bee population living in nearby hives. Noting that 24% of municipal waste consists of garden scraps, Cooley considers any notion of organic “waste” a misnomer, since it should be used to feed soil, rather than trucked to landfills, where it generates 18% of all methane emissions (yet another reason for COPs to include regenerative soil). SoA Green Studio provides George Mason’s student body a viable model for ecological land management.

In addition to “chop and drop,” a method comparable to windrows, whereby garden scraps are moved to beds, where they decay and are immediately reinvested, Cooley and his eco-art students mostly use sheet mulching to amend the campus’s Virginia red clay. To generate their soil, they cover cardboard scraps provided by the university’s cafeteria with leaves collected by maintenance workers. From Cooley’s experience, as the

soil gets richer, more and more earthworms help with the composting, eventually forcing out undesirable weeds. Despite this sluggish process, he notices how plants that “struggle[ed] for a couple of years now seem to be thriving.”¹⁰ Most important, everything is kept “onsite so there’s no dumping of organic matter anywhere else.”¹¹ Five years later, voles are back aerating the soil and rabbits are nesting in untrimmed perennial vegetation.

Sited since 2013 at Université Catholique du Louvain-La-Neuve in Belgium, Jean-François Paquay’s *Portager*® du CREAT (centre de recherches et d’études pour l’action territoriale) grants passersby immediate access to biodiverse ecosystems. To produce the artisanal soil used in his biointensive portable farm, he mixes equal parts: (1) leaf mold that has already undergone three years of decay in artisanal leaf cages, (2) horse manure that has been composted with straw for at least two years, plus (3) garden and table scraps that have been composting a minimum of two years. To the last third, this ceramist/gardener first sieves the material and then adds a bit of potter’s clay (1:24 ratio), because the local soil is very sandy. To maximize the soil’s biodiversity, he composts all plant materials together, including weeds and invasive species, with the view that whatever survives composting adds value to the mix. Paquay notes that even though young compost (under three months) has higher levels of nitrogen, seasoned compost is preferable, since it releases nitrogen at much slower rates.

Outdoor Studios/Experimental Farms

Offering dozens of annual workshops, public gatherings, and full-day, nine-month school programs (8:30–3 pm) for home-schooled children, Homeadow Song offers far more than a prototype for farmers keen to adopt biodynamic methods. Homeadow Song cofounder Vicki Mansoor takes her tamale cart around Cincinnati, where over sales of blue and green tamales she discusses the importance of preserving ancient corn varieties, growing them locally using biodynamic methods, and soaking and cooking corn in an alkaline solution, which increases its nutritional value since it increases calcium and protein quality, reduces phytic acid, which blocks mineral absorption, and enhances niacin levels, thus preventing pellagra and mental illness. Situated amid Cincinnati’s historic agriculture belt, Homeadow Song features a small pond stocked with fish, a flock of chickens, a small apiary of beehives, three wethers, and a rabbit, which all provide “fertilizer,” food, fiber, pollination, and the opportunity to practice caring and appreciative relationships.¹² Mansoor remarks how “the animals form a constant exchange: sheep grazing, moving, and breathing low on the land; bees flying to every point where there



Spora Studios, 2017, Four stages of transforming a useless lawn into a medicinal herb garden for healing the land and body, Shenandoah Valley, Virginia.

Photo credit: Mark Cooley.

is a bloom; all the manure being moved all about.”¹³ Her partner Peter Huttinger ages low-odor sheep manure with barn bedding for six months to a year to produce a slow-release fertilizer rich “in phosphorous and potassium [which] is essential for optimal plant growth, helps with strong roots, defends against pests, and [encourages] vibrant plant growth.”¹⁴ Homeadow Song’s specially designed border gardens and permaculture meadows attract beneficial insects and birds.

Although cows are considered essential for biodynamic farming, Homestead Song is too small to support cows, so a nearby farmer supplies them cow manure. As followers of Rudolf Steiner’s 1924 farming practices, Homeadow Song participants have tested and regularly use Steiner’s biodynamic preparations, such as the well-known “Preparation 500” (cowhorn packed with fresh cow dung that ferments when buried during cooler months), “Preparation 501” (cow horn filled with ground silica and rainwater buried in spring and dug up in autumn), “The Three Kings Preparation” (apply a mix of ground gold, frankincense [*Boswellia*], and myrrh with rainwater and glycerine on January 6 [Three Kings Day]), and “Pfeiffer compost starter” (inject microorganisms). Additionally, they employ classic permaculture procedures such as planting guilds (companion planting), making hugelkultur beds (branches buried in mounds that absorb water as they decay), and planting green manure (transfers nitrogen from air to soil and uptakes excess nitrates). Homeadow Song is particularly focused on creating an environment where critters find habitat, so as to discourage them from pilfering human food.

In light of numerous European cities’ goals to grow 25% of produce locally, portable farms are sprouting up on balconies, backyards, and driveways. Eager to provide city dwellers access to nutritious soil, Jean-François Paquay proposed using a 50–50 mix of mole-hill soil (scavenged from urban parks, lawns, green spaces and the countryside) and commercially available organic leaf mold. After testing for the presence of organic material, minerals, and water, he discovered that this 50–50 mix approximates the volumetric proportions of organic and inorganic material found in his artisanal soil. This “epiphany,” as he calls it, demonstrates that a mole-hill/soil mix could offer urban farmers a readily available alternative to time- and space-intensive artisanal soils.¹⁵ In reappraising mole hills as invaluable time-saving gifts from nature, Paquay’s research proves that the traditional notion of molehills as “eyesores” is shortsighted. Just as artworks routinely reveal our adaptive sense of beauty, Paquay’s “epiphany” suggests that we might treasure many more naturally occurring irregularities were we not so bent on wasting time and resources trying to eliminate them.

Like Paquay, Mark Cooley oversees a public project at his university, as well as a backyard “farm-studio.” Effectively an intervention on suburbia, Flawed Homestead (2005–2017) collaborators Cooley, Beth Hall, and their daughter Celia worked steadily over the years to gradually transform an initially lifeless, quarter-acre suburban lot into a permaculture homestead, replete with chickens, pond life, composting worms, rabbits, and a medicinal garden whose products are sold at market. Cooley remarks that “[t]he suburbs are a place where deer are hated for existing, and extreme defensive measures are taken to prevent squirrels from eating ‘bird food’ made from the very seeds of plants [ordinarily] banned by suburban homeowner associations, [yet] shipped in from thousands of miles away. ... The crowning achievement of the suburban landscape is the lawn, a giant invasive garden where a handful of nearly useless exotic grasses reign, while edible, medicinal, and habitat forming ‘weeds’ are sprayed with toxic chemicals.”¹⁶ Cooley has built both rabbit and chicken tractors, enabling animals to supplement diets with fresh vegetation, while depositing droppings that fertilize future meals.

Flawed Homestead collaborators employ vermiculture to transform organic materials like yard debris, yet they rely on chicken poop to convert food scraps into nutrient-rich fertilizers for their artisanal soil. Hoping to influence neighboring lawn-owners, they spread their “suburban” grass clippings and leaves atop paper sheets, thus smothering undesired vegetation, while accelerating decomposition. They also experiment with both active and passive hugelkultur, but Cooley prefers the less laborious, passive version that merely requires moving fallen branches to beds, where their decay nourishes soil. In 2017, Coley and family moved to the Shenandoah Valley, where their half-acre experimental farm, Spora Studios, addresses permaculture.

In lieu of adding animal waste, Vera Thaens has been experimenting with magnets and energy-absorbent cables to increase soil’s paramagnetism, thus strengthening soil’s capacity to hold a magnetic field. Her experiments with electroculture (magnetic and electric forces) are aimed at “boost[ing] soil fertility and plant growth.”¹⁷ Rather than digging holes in the ground to plant seeds, she energizes the seeds by covering them with pyramidal soil mounds, shaped using a pyramidal mold. Not only do plants grow larger, faster, and more cheaply, but magnetic energy, as developed by Belgian agriculture engineer Yannick van Doorne protects plants from “disease, insects, and frost.”¹⁸

Conclusion

Scores of artist-farmers are working across the globe, yet only a handful has been driven to produce artisanal soil. Some are motivated by soil



degradation (some scientists predict that topsoil will all but disappear by 2070), while others aim to overcome the dearth of topsoil in their immediate environment. Doubling as soil activists, these artists have taken up the mantle to broadcast the importance of agricultural practices that ameliorate soil, thus significantly boosting water absorbency. The prospect of artisanal soils holds a vast opportunity for artists and the public alike to experiment with various materials, methods, processes, and time frames, so as to optimize nutritional food, produce availability, water absorbency, and even biodiversity. Of course, pros and cons must be weighed and balanced, so that end-users can decide which materials must be purchased as is (off the shelf), and which ones will require special attention.

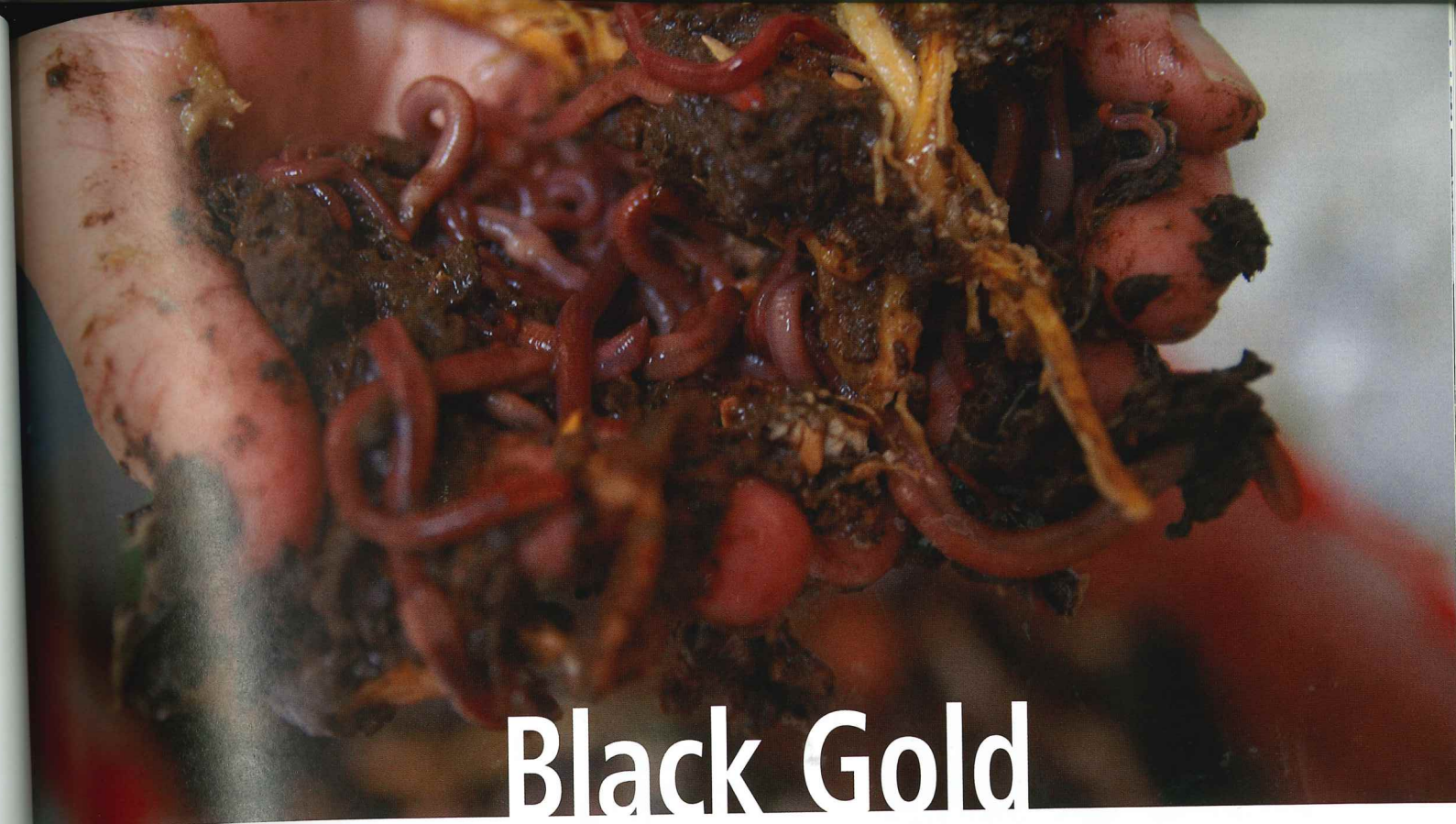
What’s radical about “artisanal soil” is hardly artists’ recipes or approaches, many of which are adapted from permaculture, biodynamic farming, and even indigenous practices. What’s radical is that by exhibiting these practices as their art, they demand both the public and art institutions to value soil on par with museum treasures. As several of these artists have lamented, had society not disassociated food from soil, they would never have felt impelled to make art that reconnects them.

Homeadow Song, Fruit Trees
Painted with Biodynamic
Tree Paste Containing Cow
Manure Preparation 500, 2012,
Cincinnati, US.

Photography credit: Homeadow
Song.

Endnotes

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18. Ibid.



Black Gold

Tattfoo Tan

Tattfoo Tan was born in Malaysia and currently resides in Staten Island, New York. Tan's practice focuses on issues relating to ecology, sustainability, and healthy living. His signature work, Sustainable Organic Stewardship (S.O.S.), is project based, ephemeral and educational in nature. Tan has exhibited at venues including Ballroom Marfa, Creative Time, Aljira, Project Row Houses, The Laundromat Project, Philadelphia Mural Arts program, and the Contemporary Arts Center in Cincinnati. He is the recipient of grants from Robert Rauschenberg Foundation, Art Matters, Joan Mitchell Foundation, and Pulitzer Arts Foundation.



The S.O.S. brand *Black Gold* takes the concept of Piero Manzoni into the twenty-first century by canning worm castings instead of artist's shit (Merda d'artista, preserved produced, and tinned May 1961). By purchasing this artwork one is confronted with the dilemma of using the compost as a plant fertilizer or maintaining its status as a work of art. Piero Manzoni also priced his work based on the value of gold (around \$1.12 a gram in 1960). Tattfoo Tan is similarly selling his Black Gold based on the current price of gold. Coincidentally, compost is called Black Gold by gardeners because of its value in improving garden soil. In an undisclosed location, a secret cellar is in the process of brewing the most creative compost ever. The curing process takes about a year, but the final results are pure gold. Black gold to be more precise. The special blended concoction is under the skillful hand and eyes of Master Composter Tattfoo. The first limited edition vintage Black Gold was available in early spring 2010. You can still reserve your bottle now! www.tattfoo.com