

Harnessing the Power of Clay



PHOTOS BY ARIANE BOLL

The author trimming hooves in 2008 with farrier-poet C.P. Tweedie.

by JAMES C. SILVERTHORNE

One of my horses, an 8-year-old mare, came in from the pasture walking with a distinct limp. I found that she had a horizontal cut (three-eighths of an inch deep by 1¾ inches long) on the fleshy back of her left foreleg's pastern, just above the bulbs of the heel. An equine veterinarian inspected the wound and advised me that healing would be slow due to the wound site's new tissue being flexed with each step. He also assured me that after healing, the previously able animal would always be lame from scar tissue forming too close to a tendon.

Swelling soon occurred on the leg from the wound up to the knee joint.

Periodically, I support-wrapped the leg from fetlock (joint just above pastern) up to the knee with elastic banding cloth. The cut began to heal with applications of a comfrey gel, but after a week the new tissue cracked open because of November's change to colder, drier air. Healing stopped. Later, I realized that applications of a moisturizing salve had been needed.

For several days the wound site showed slightly increasing inflammation. Then, a week and a half after the trauma incident, a medical doctor told me of possible treatment with an experimental clay salve. The next day I prepared and boiled a clay slurry and applied it warm to the wound area. I wrapped cheesecloth over the clay

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and around the pastern to secure the clay-skin contact.

About three hours later, I returned to the stables to check on the mare's general status. I had no expectation of seeing any healing progress so soon after a first treatment. I was astonished to find the desired near-term healing fully accomplished, and leg swelling had greatly decreased. The cheesecloth wrapping was loose and most of the clay was absent. The wound area skin had become a healthy pale pink with seemingly new tissue at the cut's indentation. No further treatment was required. The recovery continued, and by the next spring, the mare appeared to have regained her previous competency at all gaits of travel at liberty.

Since then (1980) I have not had another occasion to use a boiled clay treatment for livestock therapy, but I have kept an adequate supply of dry clay ready to work with.

HISTORY OF SUCCOR

Healing or medicinal clays have a long history as treatment for human aches, bruises and wounds. In most parts of the world people have experienced healthy results with such clay. Recent investigation of healing clays

Preparing Healing Clay

I used commercially available standard red clay (iron-bearing alumina silicate for throwing pots for stoneware firing). I added 2 cups of water to a 2-quart stainless steel copper bottom pot to work the clay into a watery slurry and boiled it at an active simmer for 25 minutes (I kept the lid on the pot to prevent clay vapor from coating the kitchen area), and then I took the pot with warm clay to the stables. I let it cool just enough to be able to handle it with bare hands. I liberally pasted slightly stiff slurry into the wound and on the surrounding tissue on the back of the pastern. I then wrapped it in cheesecloth.

finds new methods of use, for example embedded in sterile bandaging. However, boiling a clay slurry just before its application as a poultice is seen as a novel protocol made possible by little-known research. That work was first conducted by Wilhelm Reich about 45 years earlier, during the mid- to late 1930s.

Reich's original investigations found previously undescribed items being naturally produced in his prepared solutions of water with decomposing dried grass leaves and separately with garden soil. He microscopically observed the formation over time of often blue-glowing vesicles which he termed "bions." Later, he hastened decomposition of materials with heat treatments – boiling and/or autoclaving for liquids and open flame to 1500°C for dry minerals which were then plunged into a solution. Some of these bionous solutions were frozen. On examination after thawing, they



Walking 32-year-old Schnotzle — Three Hills Farm's first foal and last horse.

showed increased bion material volume and activity rate.

In his laboratory in 1939, a radiation distinct from visible light was noted from a solution prepared with sand which had been heated to incandescence. Investigating the radiation led him to discover evidence of a previously unknown natural energy field. His further research showed it to be everywhere and permeating everything, being more or less mobile and of varying concentration. Reich found that bions and bion effects occur in the context of this field being present throughout the planet's air, water, minerals, soil and bio-inhabitants. He found that while its concentration and small or large movement might change, it could not be excluded.

Reich and other investigators later saw that some lab-produced bionous compositions acted therapeutically. Indirectly, those findings prompted my single testing of the healing efficacy rate of a boiled clay as applied to my horse's wound.

Perhaps bions or similar items in the boiled clay assisted the therapy – particularly its rapid rate of effect. Likely, some of the clay's absorbable minerals and perhaps its presumed but unmeasured paramagnetic susceptibility rate contributed to the healing. Lastly, spontaneous remission or placebo functions are not thought to have been particularly active for the mare's recovery.

Selected minerals for possible increased healing capacity might be added to a clay prior to its boiling. A clay already known for its healing efficacy without heating might produce enhanced healing after its boiling. More study is needed.

BIONS & SOIL HEALTH

Bions are an entirely common early result of decomposition (lab-produced or natural) of materials, biological or mineral. About 1 micron in size, they display characteristics of liveliness (life energy or orgone energy, as later termed by Reich). They are physical units composed of a membrane containing a fluid. Bion vesicles are seen to move in the liquid carrier on a microscope's well slide and also move internally within their membranes.

Most investigations of bions have looked at their formation during a decay process and, when allowed enough time, their stages of further development as gradual re-organization toward simple life forms such as protozoa. Bions are seen as an essential part of that sequence, transitioning from non-living to living states, not as a necessarily static or final form.

Bions form by decomposition of materials at the soil surface and within soil's plant root zone. Soil surface bions may enter soil by rain or snow melt water travel, earthworm feeding, physical disturbance by animal hooves and human tillage. Within soil, decay of plants' dead roots produces bions. Wind and rain widely distribute bion-productive volcanic ash and soil surface bionous dusts. Ecological farming's deliberately intensive collaborations with nature – composting and green crop plowdowns – are expected to produce massive concentrations of bionous matter which may contribute to humus formation.

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STOCK & FLOCK

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Ecological farming's favored soil amendments are likely to be highly bion-productive when mixed into moist earth. Might bions from specific materials promote crop growth over weed growth, or assist with crop-beneficial conditioning of soil structure? A bion assay service for submitted materials would be helpful for farmers and material suppliers.

PASTURE HEALING EVENT

Several years after the mare's recovery, I scheduled liming of the farm pastures to increase their grass growth. I selected cement kiln dust (CKD), newly available in my area, for its calcium content (55 percent by weight) and its low, yet crop-beneficial concentrations of silica, potash, sulfur and iron. A by-product of cement manufacturing's processing of rock chunks to powder, some amount of dust routinely escaped into the atmosphere. With passage of the federal Clean Air

Act and EPA's enforcement of it, that loss was prohibited. Secured and then accumulating in ever-increasing piles at cement manufacturing sites, CKD's applications to farm soil removed some of that volume, usually at a low cost to farms.

One autumn, I had a tiny part of a nearby CKD inventory applied to the farm's 10 acres of several small pastures at an average rate of 1.5 tons per acre. Previously, pasture amendments of manure, soft rock phosphate, standard ground limestone and aragonite had only slightly increased grass growth from these soils initially of low to very low fertility levels.

Winter's normally low temperatures froze the ground; the later snowmelt plus rain levels were also normal, settling the CKD material into the frost-heaved, loosened soil.

Early in the spring, my inspection of new growth of pasture grasses noted nothing remarkable. About five weeks later in mid-May I saw that the CKD had unexpectedly produced vastly different results from those of my previous amendments to the pastures. Walking through the southerly facing pasture, the soonest to warm up, I saw large increases of both population density and growth rate (height) of volunteer grasses and clovers. I remembered the pastures' inadequate grass production levels of the past 11 years. I hesitated to accept so great an improvement as genuine. Did it occur throughout this pasture and also on the four other pastures amended with CKD? Yes, I soon saw that it did.

The new grass and legume growth was so dense and seemingly rich that for several weeks I carefully limited the horses' grazing the pastures to only a few hours a day until mid-summer. I fed them hay before turning them into a new growth pasture, and generally about 75 percent less grain per day.

These cautionary practices avoided the possible horse illnesses of colic and/or founder.

With another CKD application the next fall, the excellent level of pasture grass production lasted about six years, with zero additional off-farm fertilizer or mineral. During the next few years, grass plant density increased and then stabilized while legume plant density slowly decreased. Presence of pasture "weeds," plants not eaten by horses, decreased.

I have guessed that the CKD led to greatly increased soil biological activity, much beyond what would have occurred from a standard ground limestone. If so, that increased activity might have helped to release the previously applied soil amendments as

well as native mineral components.

The CKD broker (Jerry Brunetti of Agri-Dynamics) told me of similarly surprising benefits to crop production occurring at other farms having CKD applications – but only at farms having established favorable conditions for soil biological activity. No exceptional crop growth improvements were reported to him from farms with conventional chemically managed soils. Such soils, likely less conducive to biological activity than soils deliberately managed ecologically, produced crops showing only the standard growth rates which would be expected from an adequate application of ground limestone.

Conventionally managed crop production soils being the most well-known to university ag departments, farmers, brokers of ag lime and CKD, only standard plant growth elements would have been expected from CKD applications. Even my broker for the CKD, though having experience, wide knowledge and keen assessment of materials favoring crop growth in ecological production, had not fore-

“Following CKD application to a soil area, observed extraordinary crop growth attributes may evidence a biologically active soil.”

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seen CKD's extraordinary results found on ecological farms.

I have appreciated my considerable good fortune of knowing Jerry Brunetti. Of all the brokers of ag-use CKD throughout the United States at that time, he may have been one of the very few, if not the only one, competent to deliberately distinguish among the material's results on crop soils having different management – ecological or less so. Following CKD application to a soil area, observed extraordinary crop growth attributes may evidence a biologically active soil.

He later told me that Ag Extension Service field personnel, on learning of the astonishing improvements to crop production from CKD applications at some farms he sold to, were apparently perplexed as to the cause. Understandably so, for two reasons: At that time, in the early 1980s, their education and greatest work experience would have derived almost entirely from conventionally managed farms. Secondly, CKD's only well-known property important for crop production was its high concentration of calcium compounds of fine

RESOURCES

A new presentation of W. Reich's bion discoveries, **Wilhelm Reich, Biologist**, by biologist and science historian James E. Strick, Ph.D., was released April 2015 by Harvard University Press.

The Orgone Accumulator Handbook, 2010 revised edition, p. 119 James DeMeo, Ph.D. (Orgone Biophysical Research Laboratory) videos, report with color images of his lab work of bion formation, 2002: orgonelab.org/DeMeoBionsColor.pdf; [youtube.com/user/naturalenergyworks/videos](https://www.youtube.com/user/naturalenergyworks/videos).

“Emotions, Protocells, Ether-Drift and Cosmic Life Energy, with New Research Supporting Wilhelm Reich:” orgonelab.org/cart/xpulse.htm

“Investigations of Bions from Mt. St. Helens Volcanic Ash and Other Materials,” *Journal of Orgonomy*, Vol. 45, No. 1: 38-51. aco@orgonomy.org.

Beneficial Uses of Cement Kiln Dust: concretethinker.com/content/upload/437.pdf

particle size yielding a high solubility percentage during the first growing season after application, a solubility percentage greater than that of standard (unheated) similarly powdered rock liming agents.

Now, what else about CKD's action in soil might be important to crop production? Cement kiln dust

is tumbled and heated in large rotary kilns to 1500 C. Bions, anyone?

The author wishes to thank J. DeMeo, Ph.D. and J.E. Strick, Ph.D. for their valuable guidance on the historical and current science of bions. James C. Silverthorne raised, trained and pastured horses at his ecologically managed farm in northeast Pennsylvania for 35 years. Email him at js.eco-ag@usa.com.