



## May-June 2018 Newsletter

Greetings!

When entrepreneur David Bamberger retired, he answered a lifelong call to return to the natural world. In the photo on the right, he's showing the deep healing roots of a perennial prairie grass. As stated in the introduction to his excellent eight-minute video, [Selah: Water from Stone](#):



*Nearly Fifty Years ago David Bamberger went public with Church's Chicken and used the capital to purchase 5,500 acres of overgrazed land that was considered some of the poorest acreage in the Texas Hill Country. He devoted the rest of his life to restoring it.*

*David cleared overgrown woody vegetation, allowed native grasses to grow, and literally created Water from Stone. The grasses soaked in rains, took moisture into the porous rock below, and filled hillside aquifers instead of running off. There was only one spring when he bought the place, now there are eleven. There were only 48 species of birds on the first bird count, in 2014 they counted 238 species. His example of land stewardship has been replicated across the region and he's considered a visionary in land management and water conservation.*

I invite you to watch this inspiring video, as well as review the many other inspirations in our typically inspiring (and marginally humble) newsletter!

Very best wishes for a minimally overheated summer (wouldn't *that* be inspiring),

A handwritten signature in blue ink that reads "Adam".

Adam Sacks, Executive Director

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## [Regenerative Stories from Australia](#)

[Note: Soils for Life website is down as of this writing - we hope/expect it will be up again soon. Try again, it's worth it!]

The Soils for Life website provides 21 excellent case studies from the world's driest continent. Farmers and ranchers have overcome many problems, among them years of mismanagement; inadequate sources of water, and of financing; and the need to manage tracts that can exceed 2.5 million acres. It may take years or even decades, but they are finding their way on the path from dying land to abundance using a variety of approaches, especially holistic planned grazing, pioneered by [Allan Savory](#).

Cattle and other ruminants co-evolved with grasslands over 25 million years. They need each other. It's obvious that the herbivorous animals die without the grasses. What's less obvious but equally important is that the grasses die without the animals. As animals break up dried hardened soils with their hooves, they allow rain to soak into the ground where thirsty seeds can use it to sprout. They also stimulate the grasses by chewing on them and provide manure for the seeds. It's a story we're beginning to know well, from farms and ranches around the world.

These case stories are briefly summarized with links to considerable detail for interested readers. The overall impact is striking - more and more we are learning the power of the natural world, and how we industrialized humans can have far-reaching positive impacts after all.

At long last!

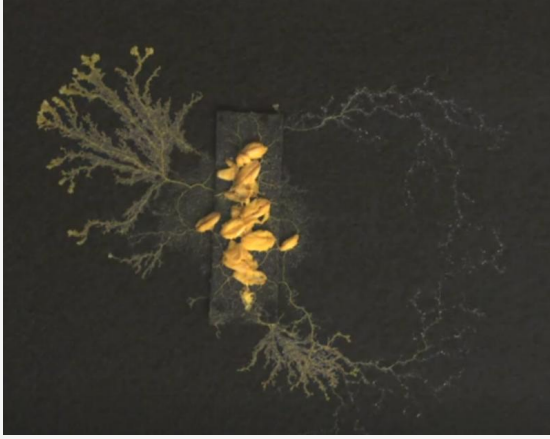
Right: Shane and Shan Joyce have been involved in farm regeneration for over 37 years. They believe that mixing their own and other peoples' experiences has helped them in achieving their vision for the landscape at [Dukes Plain](#).



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## [Species Intelligence: Listening to the Voices of Nature](#)

The planning for our November 17-18, 2018 conference in Cambridge, Massachusetts, [Species Intelligence: Listening to the Voices of Nature](#), is well under way. We now have the conference [home](#) and [speaker](#) pages. We have a few



speakers still to find, but we already have a wonderful group of people with intriguing stories about our co-creatures on Earth!

Left: Slime mold in search of its favorite food, oat flakes.

For example, check out Heather Barnett, a London artist, educator and citizen scientist, who has been working with slime molds for years. Slime molds are neither slimy nor moldy, and they seem to display remarkable intelligence, like remembering a successful path through a maze. They are actually hundreds of amoebas that have joined together to forage for food (and who knows for what other purpose) in one single cell membrane. Co-operation, not competition, is the driving force of evolution. Click [here](#) to watch [Heather's TED Talk](#). Amazing!

And please be sure to mark November 17-18 on your calendar for a weekend of extraordinary narratives about the world we all want to save!

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### And speaking of co-operation . . .

[Symbiotic Earth](#) is a wonderful new documentary about one of the great scientists of the twentieth century - and one you may never have heard of, Lynn Margulis. She added the perspective of the microbial world to the science of evolution, and that changed everything.



Microbes (archaea, bacteria, protocists) invented all the biochemical processes of life long before multicellular creatures appeared on Earth. The microbes, in effect, collaborated to create new "higher" species. Darwin, of course, didn't have access to high-powered microscopes. Lynn gave evolution a huge missing piece - that evolution is far more about co-operation than competition. For decades she annoyed mainstream biologists no end. She was rewarded with derision and marginalization, but in the end she has prevailed. Darwin would have loved it!

This is the gripping two-and-a-half hour story of an amazing scientist and person, as well as a saga of the practice of science and how paradigms are turned upside-down. Watch the trailer [here](#).

**MARK YOUR CALENDARS!** On Saturday, September 29, 2018, 1 to 5 p.m., at the Geological Lecture Hall (Harvard University\*) from 1:00 - 5:00 p.m. in Cambridge, Massachusetts, we will be showing *Symbiotic Earth*, and a panel of scientists who knew Lynn will discuss her extraordinary work. If you'd like to pick up a copy of your own, it's available [here](#).

\*Biodiversity for a Livable Climate is not affiliated with Harvard University, nor is this showing a Harvard University program or activity.

# And . . .

Here's another sample from our [Compendium of Scientific and Practical Findings Supporting Eco-Restoration to Reverse Global Warming](#). Our third issue will be posted by the end of July. The article below is summarized in Compendium Vol. 1 No. 2 (p. 16):

*Ants and termites increase crop yield in a dry climate, Evans 2011.*

Testing the effects of ants and termites on crop yield in an arid part of Australia, this study showed "that ants and termites increase wheat yield by 36% from increased soil water infiltration due to their tunnels and improved soil nitrogen." The authors conclude: "Our results suggest that ants and termites have similar functional roles to earthworms, and that they may provide valuable ecosystem services in dryland agriculture, which may become increasingly important for agricultural sustainability in arid climates."

Evans, Theodore, et al, 2011, Ants and termites increase crop yield in a dry climate, *Nature Communications* 2:262, <https://www.nature.com/articles/ncomms1257>.

Free Compendium download available [here](#).

## *Compendium of Scientific and Practical Findings Supporting Eco-Restoration to Address Global Warming*

Volume 1, Number 1, July 2017

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# Last but not least . . .

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**Many thanks!**

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