**One Backyard at a Time**

Inspired to transform the world one yard at a time, congregants at St. Andrew Lutheran Church in Beaverton welcomed the opportunity to become the first pilot project in EcoFaith Recovery’s carbon initiative about 18 months ago. With Earth Care as one of the church’s core values, we responded quickly to a presentation by Mark Ingman, who introduced us to the idea of drawing down more carbon from the atmosphere into urban and suburban yards.

Speaking about the massive imbalance in atmospheric carbon dioxide and other greenhouse gases, Carol Harker, co-chair of St. Andrew’s Yard Science Team, says, "We look at carbon as something bad when, in fact, we just have too much of it in the wrong form and the wrong place. Carbon is really one of life’s essential building blocks. The question is, how can we shift to a more harmonious balance with it, and how much more carbon can we sequester in neighborhood gardens?"

As a team, we determined that our first priority would be to establish a baseline of yards in the community and we set about doing yard surveys. Each visit required a minimum of two hours by a team of 4-8 individuals. After walking the site with the homeowner and learning about its history and management, the team divided into two groups.

One group measured the property, the house, all permeable and non-permeable ground, mapped the various regions of the yard, and collected soil samples. Many homeowners have shrub beds, as well as vegetable gardens, flower gardens, mulched areas, and lawns. The second group measured all trees on the property, recording diameter at breast height, tree condition, and approximate height. All this data was entered into iTree software, which then delivered a measurement of both the amount of carbon stored in the trees, as well as the additional amount sequestered on an annual basis.

In 2019, the Yard Science Team focused on accumulating data through yard surveys and becoming more knowledgeable. We relied on Kristin Ohlson’s inspiring book, *The Soil Will Save Us*, which filled us with hope to see so many people around the world tackling the challenge of global warming with creative low-tech solutions. It also led to more in-depth exploration of the soil environment and proven practices to make it healthier and more productive, as well as to maximize its ability to store carbon. We studied the effects of mulching on the soil—both in books and on site at people’s homes. We talked about cover crops, no till, leaving the leaves on the ground. Some members experimented with [Hügelkultur](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fen.wikipedia.org%2Fwiki%2FH%25C3%25BCgelkultur&data=04%7C01%7CAlan_Hull%40golder.com%7C2d7974ecc7764060053d08d87b87b67b%7C46b66e8634824192842f3472ff5fe764%7C1%7C1%7C637395170102795483%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=UoQgLyKhO1dv3%2FinoL5YH2qqp8POP0vEKdyY2%2B38%2FHA%3D&reserved=0). We conceived the idea of soil gardens and encouraged everyone to include at least one such garden in their landscape plan.

A soil garden is really a nursery for healthy soil rich in organic matter. It will become home to the plants necessary to capture carbon through photosynthesis. How do you create a soil garden? You start with an area of ground and cover it with some compost and lots of mulch. Each year, you add a bit more. Organisms in the soil feed on this rich organic buffet and create even more organic matter rich in carbon.

Carbon farmers with soil gardens find their new approach takes less work, saves them money, and gives them greater joy as they see their backyard habitats flourish. They learn to plant densely both horizontally and vertically and to focus on native species best equipped to flourish in the area. Doing so reduces weeds, improves permeability of the soil, and reduces runoff. Carbon farmers minimize tilling and digging so as not to disrupt the communities of organisms beginning to thrive beneath their feet. In fall, they leave the leaves on site to rot and to provide habitat for the caterpillars that feed native birds. In areas where homeowners choose to maintain some of their lawn, they may also choose to mow less, especially in the spring when pollinating insects are busy.

Trees play a large part in the planet’s ability to sequester carbon. Not surprisingly, native trees are the all-out champions when it comes to carbon capture. In our state, Douglas-firs and Oregon White Oak fill that role. At the first yard we visited, St. Andrew’s Yard Science Team computed that the trees on site stored more than 14 tons of carbon!

To date, St. Andrew’s innovative Carbon Gardening program has transformed 15 Beaverton backyards and educated dozens more people about best practices they can employ for the sake of the planet. This fall, we planted almost 1,000 camas bulbs in our yards to “Make Beaverton Bloom Blue.” In addition, members of the congregation gathered outside to bless two native oaks recently planted in a shared “Reformation Earth Garden” just outside the Sanctuary windows. And this winter, we are beginning a study of mason bees and the workhorse role these insects play in pollination.

“This project is changing the way we see the world,” Carol Harker says. “We began with soil, expanded our study to include plants, and are now focusing on wildlife. The book we selected to inspire us in 2020 is *Nature’s Best Hope*, by Douglas Tallamy. We’ve learned the value of creating homegrown national parks in our own backyards.” Why? “Because I am driven to do everything I can to restore the planet’s health. I want my grandchildren and people in later generations to get to appreciate the world I love and enjoy.”

For more information, go to EcoFaith Recovery (<http://www.ecofaithrecovery.org/carbongarden/>) and check out these two articles by Eric Luttrell, the other co-chair of the Yard Science Team at St. Andrew:

[http://www.ecofaithrecovery.org/2019/08/06/carbon-in-the-soil-of-suburban-yards-by-eric-luttrell-ecofaith-leader-from-st-andrew-lutheran/](https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.ecofaithrecovery.org%2F2019%2F08%2F06%2Fcarbon-in-the-soil-of-suburban-yards-by-eric-luttrell-ecofaith-leader-from-st-andrew-lutheran%2F&data=04%7C01%7CAlan_Hull%40golder.com%7C2d7974ecc7764060053d08d87b87b67b%7C46b66e8634824192842f3472ff5fe764%7C1%7C1%7C637395170102805475%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=1dNJTkaYSvhnVfhDkK%2BL00bgn%2Fuf6sLr3fyc0MYmJxo%3D&reserved=0)

[http://www.ecofaithrecovery.org/2020/10/09/where-are-all-the-birds-by-eric-luttrell-community-carbon-team-member-at-st-andrew-lutheran-church/](https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.ecofaithrecovery.org%2F2020%2F10%2F09%2Fwhere-are-all-the-birds-by-eric-luttrell-community-carbon-team-member-at-st-andrew-lutheran-church%2F&data=04%7C01%7CAlan_Hull%40golder.com%7C2d7974ecc7764060053d08d87b87b67b%7C46b66e8634824192842f3472ff5fe764%7C1%7C1%7C637395170102815473%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=CdBiEx%2BfqQJMpZcfkOqMxVht4898EtYxudp8xJId0g0%3D&reserved=0)

Carol Harker

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