

# LANDSCAPE CARBON CALCULATOR

By Rick Taylor



*In the past three North Coast Journal articles, Will Bakx has laid down the soil science and simple, practical applications to start addressing climate change in our daily professional lives.*

I'd like to talk a bit about how our brains see climate change and introduce you to a tool that I think will be very helpful to all of you looking to have positive impacts on the climate.

## Our brains

The human brain is excellent at recognizing an immediate crisis and triggering our biology into action. It is also great at solving most types of problems.

However, our brains perceive climate change as something so far off that it does not trigger our biological responses. In addition, climate change is what is called a “wicked” problem. Each step we take to solve it or change the components affecting it actually changes the problem itself, and our brains do not do well with that type of computing.

## Problem Simplified

We currently have too much carbon in the atmosphere to keep the biosphere in a stable condition conducive to our lifestyles. The most cost-effective and efficient means of pulling carbon out of the atmosphere is the photosynthetic, liquid, carbon cycle. Nothing new to all of us. Plants pull in CO<sub>2</sub>, use it to build tissue, then pump the 40% or so leftover into the soil.

## The relationship of emissions and sequestration rates

A typical 10' oval landscape pond costs about 2000 pounds of carbon.

An Oak tree sequesters about 100-150 pounds a year. So, it takes about 20 oak trees one year to sequester the carbon from 1 small pond!!

Hence our predicament. We emit carbon much faster than we can sequester it. While emission reduction is critical and is all that most other professions can do, the landscape professions are different. We can also build systems that sequester carbon.

And unlike most other professions, we have the opportunity to design, build, and document the carbon relationships of our projects.

With the Landscape Carbon Calculator, we can adjust our emissions and sequestration relationships based on constraints at the project level. We have the tools and the capabilities to lead the way in creating business models that provide climate-viable solutions to the built environment.

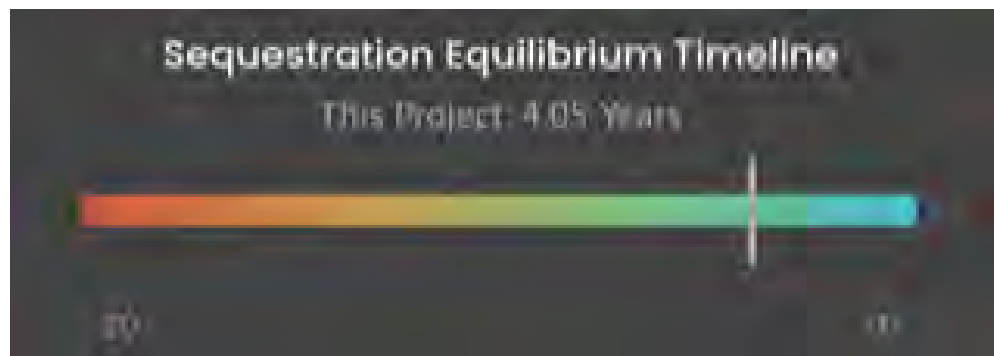
## The Landscape Carbon Calculator

The LCC is the fruit of 3 years and 3500 hours of research and mathematical formula development. This calculator will allow you to measure your carbon footprint down to the drip emitter and steel staple!

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Then, by entering the square footage of your plantings, it will calculate how long your landscape will take to sequester the carbon emitted to build it!

This is the point in time where your landscape has paid back its carbon debt and is now part of the global climate solution! We call this the Sequestration Equilibrium Timeline, or SET.



The data entry screens are designed to be familiar to Landscape Contractors, Landscape Architects, and Landscape Designers. This tool can be used to project the carbon relationships and at the end of the project to analyze the actual carbon relationships. The calculator includes almost all common materials, equipment use, transportation and offers exportable graphs and charts for all input categories.

The free account allows you to access all calculations. It only limits how many projects you can store and reports you can print.

Once signed up, we have video tutorials to guide you and free zoom training to incorporate this tool into your company.

Sign up for a free account @ [www.calccarbon.com](http://www.calccarbon.com).

Follow us on Instagram @landscapecarboncalculator

***Rick Taylor** is systematically-trained and certifiable rabblrouser, Founder/President of the design and project management firm, Elder Creek and Founder/Visionary for The Landscape Carbon Calculator and Landscape Analytic Solutions.*

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