

BioChar in Nobel Park Event Details for November 30th and December 7th

Nobel Park is undeveloped and does not appear on a map. [CLICK HERE](#) for the google maps link to the coordinates

Timeline:

9:00 am - Welcoming
9:15 – Introduction
9:30 – What is Biochar
9:45 – Explanation of the Kiln
9:55 – Kiln Safety
10:00 – Ignition
11:00 - Burn Process and dynamics of pyrolysis
12:00 pm – Biochar Enrichment – KO & Chi Microbes
1:00 – Simple Top down burn exercise
1:30 – Stop feeding Kiln
1:45 – Review Lessons Learned
2:00 – Begin Quench Process
3:00pm – wrap up
4:00 – clean up and leave

Personal Protective Equipment (PPE) Requirements:

All operators must wear the following PPE to mitigate the risk of burns and injuries:

- **Long Sleeve Shirt:** Cotton or natural fibers.
- **Pants:** Cotton or natural fibers.
- **Work Gloves:** Leather, to protect hands.
- **Eye Protection:** To shield against sparks and embers.
- **Baseball Cap:** To protect the head and face from heat and embers.
- **Breathing Mask (optinal):** Essential during the quenching process to avoid inhalation of micronized carbon, as it activates during the quenching stage. We advise all participants to stand upwind during the quenching of coals and will not allow them to approach the kiln until safe to do so.

ALL KILNS WE UNDERGO INTENSE SUPERVISION BY KILN BOSSES – LOADING THE KILNS IS DONE UNDER STRICT OBSERVATION – ONLY LOAD THE KILN

WHEN OPERATORS INSTRUCT TO DO SO

Kiln Operation Safety Guidelines:

- **Hydration:** Operators must bring ample water(1) Gallon or MORE due to the kiln's high operating temperature (up to 1200 Degrees).
- **Heat Awareness:** Extreme caution must be exercised around the kiln. Avoid placing hands or face near the kiln opening and be mindful of wind gusts that may redirect flames.
- **Alertness:** Stay vigilant to changes in conditions to prevent burns.
- **Problem Management:** Address and resolve any issues immediately. This includes monitoring and controlling the area around the kiln, particularly for combustible materials like loose sticks or leaves.
- **Material Handling:** When adding materials like dried leaves (e.g., bay leaves), combine with heavier items to prevent ejection of hot embers. Larger logs not fully pyrolyzed require special attention and extensive quenching.

**DO NOT PERFORM WORK IF YOU HAVE SERIOUS MEDICAL CONDITIONS
HEAT IS A SERIOUS CONCERN DO NOT STAND IDLE NEAR THE KILN
IF YOU FEEL FAINT OR EXHAUSTED STOP LOADING KILN**

- **Wind Conditions:** On windy days, extinguish the kiln before removing the panel to prevent ember dispersal.
- **Water Availability:** Operation is contingent upon having an ample water supply or a water tender on-site.
- **Emergency Protocol:** In case of a critical situation, contact the local fire department immediately, or in case of injury; paramedics. Each kiln boss is required to have the emergency numbers available before ignition, and first aid kits.

We also encourage all participants to take the “meet 6 challenge” to help connect and strengthen communities! [Click HERE to take the “meet 6 neighbors” Challenge](#)

Last week, Morgan Collings, one of our California Climate Action Corps fellows, had the honor of speaking with our board member, Ken Scherer, on how he started his small business, K Organics. Ken started out in 2016 in New York with a happy accident. At the time, Ken was feeding birds in his yard with pet store bird-seed, but he felt the need to provide the birds with food that was alive, as nature intended. Ken started purchasing

living meal-worms but realized how expensive they were. To cut down on costs, he bought these worms to raise on his own to feed to the avian population in his yard. After a while, Ken noticed a wide range of wildlife visiting his yard to eat the worms, however a large amount of frass (bug poop) was being produced in the many bins he kept the worms in, of which needed constant maintenance.

One stormy night, a drain broke over some frass he left outside and filled the frass-filled bucket full of rainwater. Ken left the water in the bucket for a few days and began to notice a fermenting effect taking place. His friend suggested using this frass in the garden. Ken did just that and observed how his plants flourished significantly in the weeks to come. Ken believes this was all due to the fermented frass.

Ken was inspired. He believed "[ferments] could change the farming industry, if we just had more of it." Ken's mission from then on was "pioneering how to dissolve frass in a liquid utilizing enzymes and bacteria to make frass more bioactive."

When Ken came to California in about 2020, he witnessed the magic of the Ring of Fire kiln in action and recognized the importance of biochar to enrich the soil. He understood the importance of stable carbon with powerful enrichment. Ken's vision is to coalesce with others to share knowledge and talk to those who support local biology. His homemade, handmade ferments using frass and naturally occurring sugars with nutrients from fish, seaweed, specific plants and trees, replenishes the soil and acts as a balm for fire-affected earth. The amazing thing about frass is it contains high levels of chitin, a non-toxic and naturally occurring compound that acts as a powerful fertilizer and all-natural pesticide. The ferments Ken makes encourages healthy fungi that work as a connective tissue to hold together roots below the surface of the soil. This can help prevent mudslides and other soil-related disasters post-fire.

Ken recommends sprinkling dry frass on any type of soil (less is more) as you would normal, dry fertilizer. Make sure to add compost on top or leaf mulch. Ken sells high-quality frass for \$15 per pound or \$25 per 3 pounds. Frass has a pH of 6 and increases the biological function of any soil. You can see Ken at his current station at Farmelot in Vina, California or at one of his biochar workshops which will be coming up in the following months. Check out more of Ken's amazing services on his website: <https://www.kofrass.com/services> or call him at 716-880-0386 for deliveries.

