

Newsletter September 2023



Kiwi berries - have you ever tried them? They taste just like the large fuzzy kiwis from warmer climes but these are hardy kiwis and can be grown here on Cape Cod. To learn how to grow them and several other uncommon fruits come to the Resilient Roots workshop: <u>Seven Uncommon & Delicious</u>

Fall has lots to offer!

We have a packed schedule of offerings for you this fall, including <u>6 fabulous workshops</u>, volunteering opportunities at Fuller Farm and at our Habitat for Humanity permablitzes, and several opportunities to gather and share knowledge and be together.

The most exciting news is that we have taken steps to create a solid future for Resilient Roots where we can continue to work with you to create a regenerative gardening ecosystem in the backyards of Cape Cod and create community while we do it. Help us imagine a better landscape for us all that results in a healthy ecosystem for all. See more about our plans below!

From Your Resilient Roots Team



We are very excited to welcome Debbie Clarke into the Resilient Roots fold. Debbie will be spearheading our development work as we endeavor to create a lasting place and enduring legacy.

Debbie: "I'm honored to be working with Kristie and the team at Resilient Roots to help expand the incredible work they've been doing for the past 5 years. I met Kristie and the RR team through having our own permaculture garden design, then permabilitz completed this year. It was immediately apparent to me that Resilient Roots is creating change in the local landscape of Cape Cod - both literally and figuratively. Strengthening local food systems and developing our own capabilities to be more food resilient is becoming more critical each year. Through my personal design process, the permabilitz that installed our gorgeous vegetable garden and food forest, and the many workshops I've participated in, I am developing my abilities to grow more of my own food. I harvested my first ever crop of garlic this year, and do I feel proud!

Yet this journey with Resilient Roots is about far more than food. It's about connecting with the land we're living on, regenerating the small ecosystem of our yard, stepping out of our comfort zone into a new adventure, the conversations with our neighbors as they see the changes in our garden,

and becoming part of a community of caring, warm people who learn together, laugh together, and support each other on this journey. And it's also about knowing that in the face of the complex and grand problems our world is facing, there are actions I can take that truly do make a difference. Taking action, with others who care about our own food resilience and our natural ecosystems, is so meaningful and rewarding. Collectively we are making a difference.

I'm very excited about how we can grow this impact together, and as members of this valued community, I'm inviting you to join me on this journey. I'm keen to gather stories of others who have been impacted by Resilient Roots. Why are you subscribing to this newsletter? What has attending our workshops meant for you? Why are you part of our community? Let's connect so I can hear your Resilient Roots story.

Email me at grow@resroots.org or text/call for a chat 508-873-3164."



Three Sisters By Gisele Gauthier

This year, I decided to try one of the ancient planting strategies of Native Americans. Called The Three Sisters, it involves planting corn, beans, and squash together and the indigenous peoples of the Americas have been doing it for at least 3000 years. First, these three plants take care of each other. The corn provides a trellis for the beans, the beans deliver much-needed nitrogen to the corn, and the squash covers the ground with its large leaves and vines, helping to retain moisture and hold back competing growth. Sometimes there is a fourth sister, sunflower, who lures birds away from the corn, and attracts pollinators to the garden.

Then, the plants take care of the people who plant them. All three vegetables can be eaten fresh, they all have the capacity for storage and to be used in other ways, at another time. Corn can be dried and ground into meal and flour. The Native Americans cooked it with wood ash or limestone to enhance its nutritional value. Beans offer protein, fiber, and antioxidants. They grow easily and have dozens of uses, fresh, preserved, dried, whole, and mashed. Squash is high in vitamins A and C and is high in fiber. Ancient squash varieties had thick skins that could be used to make bowls. Roasted squash seeds provide protein and essential fats, and the pulp can be cooked for use in endless ways. Together they provide the ingredients for sufficient nutrition when other food sources are scarce.

By late May, when it's time to plant on Cape Cod, I was ready, anxious even, to plant. I watched endless YouTube videos and had my plan. First, you plant the corn, to give it time to sprout and get a jump start on the beans. You can't plant it too early, because it's not warm enough, but you can't plant it too late, or it won't have time to reach maturity. Most of the advice I got suggested that starting indoors was not a good idea, recommending a very late May planting time. So I put my corn seeds directly into the ground. I don't till my vegetable garden plot. At the end of each season, I layer on some nitrogen rich seaweed, grass clippings, comfrey along with carbon filled leaves mulched up by my lawnmower, and let it cook over the winter. When it's time, I plant each seed with a handful of excellent compost. I planted 13 little elevated pods, each with five corn seeds, hoping for at least three to grow. Corn self-pollinates and needs to be close together to help make this happen. I was stunned to learn that each stalk of corn produces a single ear of corn. That's right, just one ear of corn. After 10 days or so, I was already frustrated by a 50% success rate of germination, so I dashed off to the garden center and bought some already sprouted corn. I had to plant the beans by June 1, so I needed help. On June 1 exactly, I planted half a dozen bean seeds (saved from last year's stash) around the edges of each little pod and 3-4 squash seeds (also saved from last year) in between. I had started my sunflower seeds in the house, but they were a little gangly, so I didn't have much confidence, but I planted them outside anyway. And then like every good gardener, I waited. And I watered. And here's what happened. The corn was very slow to emerge and grow. Some of the stalks never made it. Some of them grew as expected, and there was every degree of in between. Out of about 30 stalks, I got 13 ears that were worth harvesting.

The corn itself was delicious and there was enough to make a yummy corn salad using cherry tomatoes, mint and Swiss chard also growing in my yard. At first, it looked like I was going to lose the squash to blossom end rot, but eventually the vines made a nuisance of themselves, and I ended up with half a dozen lovely butternut squash ranging from tiny to huge. The beans stole the show. At first, it seemed like they were just going to bury the corn and squash in a carpet of vines without producing much fruit. Then, suddenly in mid-August, hundreds of flowers started to appear in that bean carpet. The corn stalks bowed down to the pressure, providing little if any structure and the bees went wild. Now, every day, I pick a bowl full of young beans, leaving the older ones to grow bigger and be harvested as dried beans to use over the winter. Those gangly sunflowers grew over the roof line and provided a much better trellis for the beans than the corn. The flowers were easily a foot across, and the sight of bees and hummingbirds has provided many meditative hours of entertainment, especially in the early morning.

I love being in my garden, and I love to grow vegetables that I can use and share. Like most gardener/farmers, I have mixed results that change every year. It's this lack of outstanding success that inspires me to try new things each year. I am not afraid to fail in the garden because it seems to be part of the routine. This year's experiment gave me the opportunity to pay my respects of the indigenous way of doing things while realizing its limitations in my own environment. I think this technique for growing requires a longer growing season than what the Cape has to offer, and more space than I have to offer. Next year, I'm going to try potatoes and onions. I'll report back so stay tuned!





Resilient Roots is Hiring!

We are looking for a part-time Assistant to the Director to join us that is committed and passionate about our mission and vision and being a part of our small but growing organization. This position will take responsibility for social media, managing the website, helping with event coordination, database management, and a variety of other tasks. Flexible schedule. Hard-working but fun-loving. Please contact <u>kristiekapp@resroots.org</u> for a complete job description.



This Seasons Featured Plant Amazing Oaks by Deb Winther

Most of us who live on Cape Cod are familiar with the oak trees (black, chestnut, scarlet, and white) growing in pitch pine-oak woodlands that are still common on the Cape. Oak trees are so common that you probably don't give them much notice until fall, when you grumble about raking up all those "darned oak leaves" from your lawn and sweeping all those "accursed acorns" off your driveway. But did you ever stop to think about how oak trees help the environment every day? Here's how:

Oak Trees Support Wildlife – You might think this is an obvious benefit of all trees. However, did you know that oak trees top the chart in supporting over 500 species of Lepidoptera that provide critical food for baby birds? In addition, these stately trees support other wildlife by providing food and shelter for deer, raccoons, turkeys, mice, squirrels, and ducks. Oak trees can support a good balance between humans and animals by providing crucial habitat that doesn't include your attic.

Oak Trees Provide Shelter - On a stormy day, oak trees keep the rainfall to an even, more gentle impact that helps keep animals and soil sustained in a way that is not overpowering. When the sun is shining, oaks provide a reprieve from the heat in the same way that they block the rain from coming down too quickly and heavily. The leaves and branches of oak trees shade creatures big and small from getting too much sun. The same goes for the soil, keeping it from drying out as quickly as it would in an area that is uncovered and overexposed. The shade from an oak tree helps to mitigate climate change because it helps to regulate the ground temperature of the soil even as air temperatures are rising.

Oak trees also provide shelter for many animals. Small mammals like raccoons, squirrels, possums, and others can be found nesting in holes of older, more mature oak trees. Larger mammals like foxes are also known to make dens in the space of fallen, hollowed oak trunks. Birds nest in the branches, while insects and spiders nestle under the bark and in the soil near the base of the oak tree. Frogs, snakes, and salamanders often make their home in the exposed roots of an oak tree, especially along a body of water. No part of an oak tree's real estate goes to waste.

Oak Trees Improve Air Quality - Oak trees can play a large role in boosting air quality to a higher level. As with other plants, photosynthesis is a huge factor in keeping airclean. This is why it's said that the more trees in an area, the better! But how does photosynthesis clean the air? Leaves of oak trees store carbon dioxide while allowing oxygen to be released back into the atmosphere. That's just the basic premise. Airborne pollutants are also absorbed but are not released back out in the same way that oxygen is, so the leaves are acting as a sort of vacuum for the 'bad' while helping to produce the 'good' in our air supply. A single oak can absorb up to 10 pounds of air pollution per year, which adds up when you consider that the average oak tree lives hundreds of years. One oak tree has a powerful environmental impact of its own, but just think about what all those pitch pine–oak woodlands are doing for the air quality across the Cape. Think hard about that the next time your local conservation group wants to preserve a wooded area of your town from a developer's bulldozer.

Oak Trees Improve Soil Quality - The roots of an oak tree help bind the soil together. This helps deter erosion, which can lead to more serious issues like drought and desertification. On top of this, the canopy of trees helps to both capture and slow rainfall, which prevents accelerated erosion and run-off due to rain. This idea even extends to the rest of the elements. The upper portions of an oak tree specifically help block wind from an area, as well as mitigating the spread of fires. Oaks also help to curb water pollution by soaking up toxins. Pesticides, trace contaminants, and even fertilizers are soaked up and allowed to break down slowly to eventually act as nutrients.

Decomposing Oak Trees Break Down Nutrients - Decomposing oaks serve as a home for salamanders, worms, termites, ants, and snails. These tiny creatures play a big role in breaking down the tree to eventually turn it back to the soil, providing nutrients for future generations of plant life. Not only do small creatures utilize decomposing oak trees, but the big ones benefit as well. Remember that fox we mentioned creating a den in a fallen oak tree trunk? So many creatures can benefit from oak trees. Both the oaks that are alive and thriving, and the ones that have fallen. If it's safe to do so, consider leaving those tree snags (dead standing trees). You'll be amazed at all the wildlife that may call it home, or at the very least, lunch!

Oak Tree Acorns Provide an Alternative Food Source - Oak trees produce about 140 pounds of acorns per tree at a time, according to research presented at the University of California's Division of Agriculture and Natural Resources. This number can shoot up to over 1000 pounds, however, in mature oaks of certain varieties. Acorns are preferred by many wildlife species over agricultural crops and are also naturally sought out by some domesticated animals (pigs come to mind). Humans can also eat acorns, and they are tasty when prepared properly. They can be eaten whole, and roasted with salt, ground into flour or acorn meal, or even pressed for oil. Compare them to any sort of salted nut, like walnuts, almonds, or peanuts. Want to learn more about acorns? <u>Sign up for our workshop, "All About Acorns"</u>, on October 21st.

References:

Z. DeAngelis, 2021, "7 Amazing Ways Oak Trees Help the Environment", Tree Journeyhttps://treejourney.com/amazing-ways-oak-trees-help-the-environment/D. W. Tallamy, 2021,

Keep Checking Our Notices to Learn More About Some Fun Upcoming Events

Coming Later this Fall: Movie Screenings Followed by Discussions and a Gardening Book Club!





Click Here to <u>Check Out Our</u> <u>Workshops Coming This Fall!</u>







Resilient Roots is grateful to Barnstable Land Trust (BLT) for leasing us the land we have our demonstration garden on at Fuller Farm. We wanted you all to know about this extraordinary event they are holding in honor of their 40th Anniversary. BLT proudly presents the first ever Thoreau's Cape Cod Readathon happening from 10 am to 3 pm, October 7th and 8th. For more information go to the <u>BLT website here.</u>



Oaks and 3 sisters, plus a new addition

