

Living Green Quarterly

December 2025



Sentinel believes that sustainability – or living “green” – is at the heart of protecting our future. Working together we can find the fun in being Green.

Green VS. Green

Which fun fact will you show off at the next dinner party?

The term “green” comes from an ancient Proto-Indo-European root word *ghre-* meaning “to grow”. The root evolved through Germanic languages into words like Old English “*grene*,” which referred to the color of living plants.

<https://www.etymonline.com/word/green>

According to PIRG.org, More than 35% of the microplastics in the ocean are thought to be from washing clothing made of synthetic fibers.

Critical Crossroads: *A Wildlife Crossings Tail*

By Karen O'Brien



Since the dawn of the automobile, animals, both domesticated and wild, have posed challenges for drivers. At the time, it was the domestic horse that frequently caused accidents, as frightened horses pulling carriages would scare easily and bolt with the new and surprising elements in the burgeoning urban environment. As roads have expanded and fragmented habitats, however, wild animals have become both the cause and, too often, the casualty of vehicle collisions. Finding solutions for the growing challenges to road safety and conservation efforts, as urban development continues to expand, has become essential to addressing the threat to both human safety and local wildlife.

Wildlife crossings, such as underpasses, viaducts, ecoducts and tunnels, are proving to be an exciting and effective tool for protecting travelers and wildlife while also preserving biodiversity. As infrastructure growth limits animals' access to food, shelter and mates, these crossings restore habitat connectivity, enabling safe movement, improved survival rates and adaptation to the ever-changing weather patterns.

Fortunately, these crossings are gaining support nationwide and are being welcomed across many states, as these safe passages are also saving lives. According to the Federal Highway Administration (FHWA), it is estimated that 1-2 million vehicle collisions with large animals occur annually in the US. The impact of these accidents is nearly 200 mortalities and 26,000 injuries for drivers and their passengers per year, along with nearly \$10 billion in property damage. Research shows these structures can cut collisions by 80-99%, saving \$235,000-\$443,000 per crossing each year. As more are built, leaders view them as a smart, cost-effective solution for safety and conservation.

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New Mexico led the way in passing legislation for a statewide wildlife corridor network, inspiring states like Oregon, Arizona, California and Florida to follow suit, all before the 2021 infrastructure bill, through their own legislation or governors' executive orders. The passing of the infrastructure bill has provided more states with the framework for expanding the wildlife crossings nationwide, helping states with dense populations and road networks to protect species such as deer, bears and foxes, while simultaneously saving lives by reducing collisions.

Whether saving defenseless animals and their surrounding ecosystems, protecting our wallets from property damage, or protecting human life by avoiding collisions, there is a consensus among scientists and environmentalists as to just how beneficial these pathways are and how they should be widely implemented. With widespread support from the populace, it does indeed seem to be the course of action moving forward. And I, for one, am looking forward to a safer, more sustainable way to drive.

Employee Spotlight

By Karen O'Brien



Kristen Tharrett

Manager at Monterra Las Colinas Irving, Texas

What does sustainability mean to you?

To me, sustainability means taking actions now, even just small actions, to ensure I am doing my part to protect and preserve the environment for my son, and future generations to enjoy.

Simple things like recycling, growing our own little garden at home, and living in a walkable community or biking when we can.

What are the objectives of your sustainability efforts and what progress has been made in meeting your goals?

In addition to our ongoing landscape upgrade efforts, we are currently working on converting lighting throughout our parking garage, and common area hallways to LED this year. This has not only helped with energy and cost savings already, but it has also reduced heat within the interior hallways, which residents are grateful for here in Texas!

What made you decide to get more involved with your community's sustainability efforts?

I have a very active, and inquisitive 9-year-old son, who is also very impressionable. We love being outdoors and have spent a lot of time traveling to State and National parks across the country the last couple of years. It has been fun teaching him how things he does, or things he uses can impact the places we have visited, and the world around him every day. Watching him learn has certainly made me more aware of my own impact and has made me want to focus more on improving our resident, and communities impact as well.

The Gift

That Keeps On Giving...

By Heidi Adams



While packing up our Thanksgiving leftovers and sneaking a few extra bites of pumpkin pie, the warm, gratitude-filled atmosphere felt as if it was already shifting to a more fast-paced, anxiety-fueled portion of the holiday season. The transition from reflection to shopping, holiday parties and gift-giving can feel abrupt, but whether you celebrate Christmas, Hannukah, Kwanzaa, Three Kings Day or Boxing Day, chances are you'll end up with a few unnecessary gifts. The good news? There are plenty of ways to sustainably repurpose or rehome those generous gifts that just are not right for you.

Regifting: Returning something that is not your style, though seemingly harmless, often results with the item in a landfill, as it may not be cost-effective for retailers to resell it. Passing the gift on to someone who would enjoy it keeps the item from its ill-fated conclusion and brings joy to the right recipient. This of course only works if you are mindful of the recipient and what they would enjoy, as well as being mindful to avoid giving it back to the original giver, no matter how much they might love it.

Sell it: It may not be cost effective for retailers to resell a tchotchke or an item of seasonal clothing, but with places like Poshmark, The Real Real or Facebook Marketplace, we are able to find a good home for any object while adding a little extra money to your pocketbook.

Repurpose or Upcycle: Consider upcycling or repurposing what you received. This may be for the more creative people among us, but even those of us with not a creative bone in our body are able to add our kids or nieces and nephews' artwork onto our previously unwanted clothing, as long as the item is cotton, polyester, or blend of the two. All you

need is some plastic wrap, scissors, parchment paper, an iron and a YouTube tutorial to create your new favorite top to wear. If you have a slightly higher skill set, you could repurpose an unwanted sweater or other materials into tote bags, pillow covers, pet sweaters or even blankets.

Host a Gift Swap: Possibly the most fun idea on the list, the idea is to have a get together after the hectic season has slowed down and enjoy a "bad santa" themed white elephant party. You can do this with your work friends with gifts from home and vice versa. This allows you to continue the season of togetherness and giving in a fun new way without the hassle of finding something or spending even more money on something new. All of this with the added benefit that your unwanted gift might just be what your friend or family members wanted or needed.

Donate: Giving during the holidays is a meaningful way to help others during the holiday season. Whether it's something you are ready to let go of or just do not want, your donation can bring comfort and dignity to families in need. Items like toys, clothing, toiletries, and suitcases are always useful and appreciated. Check out local charities, shelters, soup kitchens, or organizations like The Salvation Army to see how you can give.

To live more sustainably, we should all be putting more thought into the gifting process. Take simple steps to ensure that it is something the recipient wants or needs, make sure the gift is well made and will not deteriorate after a couple of uses and try to find a gift that simultaneously supports a small business or a charity. But if someone misses the mark this year, we hope this list helps you make a more sustainable decision about where it goes next.

Word Connections

CAN YOU GUESS THE FOUR CATEGORIES

WITH THEIR FOUR CORRESPONDING WORDS?

| | | | |
|--------------|---------|------------------|--------------|
| ST. PATRICKS | VOLE | THREE KINGS | THUMB |
| GREEN | ORGANIC | BADGER | MEERKAT |
| ENERGY | HOUSE | CIRCULAR ECONOMY | GOPHER |
| GROUNDHOG | GRAPE | VALENTINES | BIO PLASTICS |

Maintenance Pro Tip

By David Rodriguez-Sanchez

With news swirling around about how there are hazardous Volatile Organic Chemicals (VOCs), in our everyday store-bought cleaning products; having eco-friendly cleaning solutions that are toxic free, effective and inexpensive, may just be the answer to your cleaning woes. See below for:

Microwaves:



Fill a microwavable bowl with equal parts water and white vinegar. Microwave the cleaning solution for 10 minutes then remove the bowl carefully, and remove the microwave rotating plate and wipe down the entire microwave with a clean rag or paper towel. While the plate is out, wipe it down in the sink with soap and water, and replace it back in the microwave.

Garbage Disposal:



If neglected the disposal can emit an unpleasant odor. Just add some ice to the top of the garbage disposal, add a tablespoon of baking soda to it before pushing it down then turning on the garbage disposal and water. The ice will help dislodge food that is stuck to the blender, and the baking soda will help to deodorize.

General Cleaner:



For both the kitchen and bathroom, simply mix 1 part Castile soap with 1 part baking soda. Castile soap is a natural, vegetable-based cleanser that cuts through grease, while baking soda is a mild abrasive that scrubs away grime, dirt, and odors—tackling tough stains, limescale, grease, and more.

This *Current* Renewable Energy is Causing Waves

By Skye Randazzo



Sustainability has become imperative around the globe in recent years. It's no longer only scientists and experts who say sustainability is important, but a large collective of people, business leaders and world leaders, from almost every country, have also noticed the importance of being eco-friendly and creating a more sustainable ecosystem. As we continue to advance towards the goal of net-zero carbon emissions, with a growing number of countries, cities, and companies setting targets to do just that, finding new efforts and technological advancements in conservation is proving to be very exciting.

There are several start-ups and companies working on unique solutions to combat climate change. One example is Genomines, who focus on phytomining, which is a method of extracting minerals using flowers and plants. This approach aims to reduce the need for traditional mining while simultaneously cleaning up and rehabilitating contaminated sites. Another pioneering enterprise is Glass Half Full, which is a small firm in New Orleans. The company has found a way to crush over 12 million, and counting, recycled glass bottles, converting the glass back into sand and using the sand for community and environmental projects. The most notable project being to restore Louisiana's shrinking coastline. While these sustainable businesses tackle specific aspects of sustainability, there is one organization, named Minesto, that has made a name for itself, originally as a start-up with an idea to harness energy in a new way.

Minesto produces a "Deep Green" underwater tidal kite and is looking to be the future of renewable energy using tidal streams and ocean currents. Founded in Sweden, the new venture already has a pilot tidal kite farm in the Faroe

Islands and is a key part of the islands' 2030 goal to reach 100 percent renewable energy. The pilot program has been so successful that they have struck project deals with both the UK and Taiwan to install and operate a second-generation tidal energy converter, with hopes to make incremental shifts to renewable energy.

The underwater kite is exactly what you might imagine it to be. Resembling a large drone-like craft, it is tethered to an underwater cable system that is anchored to the ocean floor. Working harmoniously with the water's current, the kite moves through the water in a figure eight pattern, generating energy by pulling water through the turbines forcing them to spin constantly. Because water is nearly 800 times denser than air, it can generate much more power than wind turbines in much less space. That clean energy is then sent to the grid through the cable system where it can be distributed to the masses.

A compelling feature of this renewable energy source is its reliability. Comparing it to inconsistent wind patterns, that may not move a wind turbine for days, or solar energy that can often be hampered by clouds depending on where you live, the underwater kite is powered by the ever-consistent ocean current, that can ensure a continuous and predictable flow of energy in every corner of the world.

Though the company conducts environmental impact assessments and ongoing monitoring in collaboration with universities and authorities, there are risks associated with this still-developing industry. Including initial high costs and the possible disruption in the habitat, but the significant benefits of predictable renewable energy may ultimately outweigh these concerns, paving the way for a more sustainable future.

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| WINTER HOLIDAYS: Groundhog, St. Patricks, Three Kings, Valentines |
| BURROWING ANIMALS: Badger, Gopher, Meerkat, Vole |
| SUSTAINABILITY BUZZWORDS: Bio plastics, circular economy, green, organic |
| GREEN ____ : Energy, Grape, House, Thumb |

Themes Revealed

Roasted Marinated Chicken with Winter Vegetables



Ingredients

- 4 bone-in skin-on split chicken breasts
- 7 carrots, peeled and cut into 2-inch sticks
- 7 parsnips, peeled and cut into 2-inch sticks
- 2 whole heads of garlic, broken into unpeeled cloves, plus three cloves minced
- 2 tbs olive oil for the marinade, plus 1 tbs for the vegetables, plus 1 tsp for garlic
- ¼ cups of dry white wine
- ¼ cup of stone ground mustard
- ¼ cup of raw honey
- 1 teaspoons kosher salt for the marinade, plus more to taste for the vegetables
- 1 tablespoon thyme leaves

Local and Seasonal Eating

By *Skye Randazzo*

Today, supermarkets provide a diverse array of food at any time of the year. Unfortunately, sourcing food from all over the world that is neither local nor seasonal can have a negative environmental impact; transportation alone is a large contributor of pollution to our air and waterways and adds to our dependency on fossil fuels. The food provided has diminished nutritional value because it is picked prematurely and produced with chemicals to survive the long journey from overseas.

To help lower our carbon footprint, support your nearest farmers markets that offer fresh, local and seasonal produce. Our Marinated Chicken Roast with Winter Vegetables recipe showcases a way to create a dish with many ingredients found at your local green market; bone-in skin-on split chicken breasts, carrots, parsnips, dry white wine, thyme and raw honey are just a portion of winter's amazingly delicious flavor profile.

Directions

- 1) Prepare the marinade for the chicken – combining 2 tbs of olive oil, raw honey, stone ground mustard, white wine, thyme, minced garlic salt and pepper in a large bowl and combine well.
- 2) Pat the chicken dry with paper towels and place the chicken in the marinade bowl and coat the chicken well with the marinade, including under the skin. Cover the bowl ensuring the chicken is in the marinade and allow the chicken to marinate in the fridge for 2 to 4 hours.
- 3) When the chicken is done marinating, Preheat the oven to 375° and line a baking sheet with either a reusable silicon mat or aluminum foil and set it to the side.
- 4) Begin cutting the carrots and parsnips into 2-inch sticks – add them to a different bowl adding a tablespoon of olive oil, along with salt and pepper to taste and toss the vegetables in the bowl until fully coated.
- 5) Take the marinated chicken out of the fridge and add it to the lined baking sheet skin side up. Add the vegetables around the chicken.
- 6) Take the bowl that the vegetables were in and add the unpeeled cloves of garlic, adding a tsp of olive oil and coat the garlic. Then add the garlic to the baking sheet.
- 7) Cover the baking sheet with foil and place it in the oven for 25 minutes. Remove the foil and allow to cook for another 10 to 15 minutes until golden brown. The cooking time may depend on the size of the chicken breast; use a meat thermometer to ensure it has reached 165° Fahrenheit.
- 8) Let the chicken rest for about 10 minutes before serving with the roasted vegetables. The roasted garlic will pop right out of their casing and can be added to bread, mashed potatoes or to each bite of chicken. Enjoy!

Source: *Skye Randazzo*