



12-9-2022

## Our Natural World

Jennifer Mattei

*Sacred Heart University*, [matteij@sacredheart.edu](mailto:matteij@sacredheart.edu)

Follow this and additional works at: [https://digitalcommons.sacredheart.edu/bio\\_fac](https://digitalcommons.sacredheart.edu/bio_fac)



Part of the [Ecology and Evolutionary Biology Commons](#)

---

### Recommended Citation

Mattei, J. H. (2022, Fall). *Sacred Heart University Magazine*, 4(1), 5-7.

This Article is brought to you for free and open access by the Biology at DigitalCommons@SHU. It has been accepted for inclusion in Biology Faculty Publications by an authorized administrator of DigitalCommons@SHU. For more information, please contact [lysobeyb@sacredheart.edu](mailto:lysobeyb@sacredheart.edu).

# Our Natural World

Published: DECEMBER 9, 2022

Time and again, nature is there for us to recharge body, mind and soul. It's time we return the favor.

From the **Fall 2022 issue of Sacred Heart University Magazine**  
[https://digitalcommons.sacredheart.edu/univpub\\_shumag/51/](https://digitalcommons.sacredheart.edu/univpub_shumag/51/)

**By Jennifer Mattei, Ph.D.**



It's nothing earth-shattering to say our natural world gives us everything we need to survive, from the oxygen we

breathe and the clean water we drink to that apple you are enjoying with your lunch today. We all know this. However, we sometimes fail to appreciate and act on the converse—if we fail to maintain a well-functioning and resilient natural world our future is literally at risk.

What's more, our reliance on nature goes deeper than the base physical essentials of air, water and food that are required for life. Our bodies—physically, mentally and emotionally—are healthier for their interaction with nature. Increasingly, research has shown the benefits of engaging with the outdoors, from reduced risk of numerous diseases, to reduced incidences of depression and anxiety, to improved creativity and problem-solving skills even after a short walk in nature during a break from our desks and sofas. It's no wonder that dining outdoors has become a permanent feature in many towns and cities.

Of course, the research only supports something we've felt intuitively for millennia. Namely, that nature feeds our soul. It's where we recover, recharge and rejuvenate. For evidence, just look at the language we use when we speak of vacation. We enjoy a "getaway" or "escape" from our everyday life, implying that we know the built world we inhabit is, at best, incomplete for our true wellbeing. We look forward to "fun in the sun," as if the sun is only where our vacation is, as if the same sun does not shine on our own homes and offices. Whether on an island beach listening to the crash of waves or hiking a mountain pass, the difference is not the sun but rather that we are finally out in it, appreciating the natural wonders on which it shines.

Certain as our dependence on the natural world is, it's a wonder there is any question over what a priority its preservation should be. Environmental stewardship is not a hobby or a "pet project." It's an existential imperative. A "Silent Spring" is not the only consequence of pollution. Our heavy footprint on the natural world has already resulted in scorching dry summers and fiery falls. Many species that were once common and numbering in the millions, like the monarch butterfly and the tri-spine horseshoe crab of Asia, are now listed as endangered.

When these common, formerly abundant species (think of tree species or marsh grasses) are found in decline, biodiversity plummets and the important ecological roles they play, simply by the very nature of being abundant, become blaringly obvious.

The connection between abundantly spawning American horseshoe crabs and millions of migrating shorebirds is well documented. In the spring,

shorebirds rely on consuming horseshoe crab eggs to fuel their migratory trip to their breeding grounds in the Arctic. But as horseshoe crabs decline from overharvest and habitat degradation, the eastern red knot population (as just one example) has declined from over 94,000 in the late '80s to fewer than 14,000 this past spring and is now federally listed as threatened. The eastern oyster, once numbering in the billions along our shores and growing to the size of dinner plates, is now rare along the Eastern Seaboard.

But it's not just about the birds or the oysters. This is a point we cannot stress enough. Oysters, if unharvested, build reefs to protect our shorelines from erosion and storm damage with the added benefit of filtering and cleansing the water in our estuaries, increasing habitat, biodiversity and healthy fish populations. The health of red knot populations likewise reflects the health of our estuaries in the Americas. These migratory shorebirds are intricately connected, both as prey for Arctic fox and snowy owls and as predator to millions of insects and other invertebrate species. With the decline of either species, entire food webs collapse—including, ultimately, our own.

But there is hope.

Here at SHU, our research on the restoration of coastal habitats has demonstrated two key points. First, we can bring back these important abundant species and their ecosystem services. SHU's restoration work at Stratford Point, using state-of-the-art techniques in building coastal resiliency through nature-based design, is now a model for New England states and is currently being applied along shorelines in Rye, NY, and the East River of New York City. Second, the commitment of our students in the program, working both in the classroom and during summer research opportunities, proves the level of impact individuals and local communities can have when we act with intentionality.

We can all participate in the restoration of nature. Everyone reading this article should commit to planting a tree this coming spring. It is easy to find out what tree species are native in your area—as well as which ones not to plant—with online resources.

If you prefer flowers, plant a native pollinator garden! The visiting hummingbirds and butterflies will brighten your view during morning coffee. Planting beautiful, orange-flowered butterfly milkweed may just save a few monarchs migrating through Connecticut in the fall, and native flowering perennials and shrubs will feed pollinators with their flowers and migratory songbirds with their fruits.

Dislike gardening altogether? There are numerous initiatives to support, such as the Nature Conservancy's "Plant a Billion Trees" program. Or start a "No Mow May" campaign in your neighborhood. By not mowing your yard until June, you can double the number of pollinators that survive in the spring.

Living in a temperate climate is glorious. Connecticut native and famed landscape architect F.L. Olmsted (who designed, amongst countless other projects, Central Park) said it best: "The enjoyment of scenery employs the mind without fatigue and yet exercises it, tranquilizes it and yet enlivens it; and thus, through the influence of the mind over the body, gives the effect of refreshing rest and reinvigoration to the whole system." This year, let us celebrate the bicentennial of his birth by committing ourselves to the preservation of the natural world that has always been so graciously committed to the preservation of us.

*Pictured above: Professor Jennifer Mattei at Stratford Point (August 2022)*

