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Garden Blog Article
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New Year's Re-solution

New Year's Day. A week ago a record-busting lethal storm hammered most of the country, but here I am in my garden. I should be cold, but I only need a sweater. The ground should be frozen, but my fork sinks in readily. I'm grateful for this freakishly warm last chance to plant an almost-forgotten bag of spring bulbs, but uneasily aware that all is not as it should be on our small blue planet.

But the new year is a time for optimism and fresh starts, so I will share a story of remarkable restoration in an iconic landscape: our very first national park, Yellowstone. About a hundred years ago, wolves were exterminated in and around the park, the better to protect people and livestock—or so went the thinking of the day. In the decades that followed, the local elk population exploded, while the health and variety of other animals and plants faltered. Without the wolves to keep them in check, the elk overgrazed the meadows and overbrowsed the trees. In areas stripped of vegetation, small mammals had no shelter, no food, no safe place to raise their young. The elk even picked clean the berry bushes, which the bears depended on to build layers of fat for winter hibernation. Instead of constantly moving around and avoiding open areas that made them easy targets, they congregated along the riverbanks, weakening the willows, aspen and cottonwood that were essential food for beavers and equally essential bulwarks against erosion. Without clear water, beavers went elsewhere. Without the shelter of beaver dams, fish went elsewhere. Without fish, eagles and otters went hungry.

Eventually it began to dawn on the park's caretakers that they might have made a mistake. In 1995 forty-one wolves were re-introduced to Yellowstone. The most immediate impact was obvious: the elk population is now about a quarter of what it was at its peak, while the wolves' numbers have more than doubled. But the other effects have been astounding. Dozens of species, from bears, coyotes and eagles all the way down to beetles, now thrive on elk carrion leftovers. Small mammals find homes in the re-established vegetation. Pollinators returned in force to newly abundant flowering plants. Without incessant browsing, riverbank trees grew to full size, recreating a healthy habitat for songbirds.

But the biggest impact was on the rivers. Healthy root systems of large trees filtered the groundwaters reaching the river. Once the water cleared, the beavers came back, building nine dams where there had been only one. In the newly clear water, cooled and sheltered by the dams, fish and amphibians flourished, followed by the otters and other predators who fed on them. Even humans benefited, as the river once again provided clean drinking water for downstream cities.

Biologists call this a "trophic cascade." We might call it a miracle. At the very least, it's a lesson. Like Yellowstone in 1995, our local ecosystem is out of whack, with few apex predators to hold down the deer population. Unlike Yellowstone, though, developed areas cannot be fixed simply by letting the animals sort themselves out. Few of us want to share our suburbs with bobcats or bears, even though we pay a heavy price in deer-destroyed landscaping. We bemoan the visits of coyotes, hunters of cats and small dogs, even as we complain in the next breath about too many squirrels. Connecticut will never again be the perfectly balanced ecosystem that awaited the first European settlers.

Even so, there are small steps we can take toward restoring the natural order. If we plant as many native species as possible, we feed the many creatures—insects or amphibian, reptile or mammal—which are supposed to be here, and which evolved to keep each other in balance. If we let some part of this country's 40 million acres of lawn go wild, we provide a sheltered habitat for so many creatures. Most urgently, we must discipline ourselves to do without pesticides and herbicides, accepting that the occasional loss is preferable to destruction of entire species—and the cascade of unforeseen consequences that follows.

If the Yellowstone experience teaches us anything, it's how much we don't know, and how imperfectly we can predict the consequences of human activity. At the same time, it teaches us how resilient nature is, given half a chance. With humility and hope, let's resolve to begin the 2023 gardening year making the changes that will best protect our corner of the world.