Entangled in the Vines: Why We Garden

What could possibly elicit my Chinese speaking grandfather to exclaim, "My God!" in English? It was the sight of my younger brother snipping away at his budding pea plants. My grandfather had tenderly cared for them, making sure to add organic compost and to water them regularly. And now, before his eyes, his grandson was happily destroying every little bit of green that he could reach. I, on the other hand, had dutifully picked the mature peapods that we would later sauté with minced meat. This was during the pandemic when social isolation was a shared anxiety. Luckily, my family hosted gatherings in my grandfather's backyard so that we could be present for each other while maintaining social distance. It comes as no surprise that many others around the world picked up this hobby that would bring them bountiful advantages.

Going back in time 12,000 years ago, a revolution took hold of human society, and it forever changed the course of history. This dramatic change was neither political nor social, in fact it was agricultural. What we now call the Neolithic Revolution converted prehistoric life from hunting and gathering to settled farming. Ancient civilizations harvested the land in order to sustain themselves, but over many millennia, the populace immigrated to cities, and away from pastoral landscapes. Even so, our rustic past continues to thrive beneath our urban facades. An estimated "95.8 million U.S. households participated in lawn and gardening activities" ("U.S. lawn and garden participation 2020"). You might be wondering why people continue this practice if they already have access to a stable food supply? Each individual's experience is unique, but the principal benefits of cultivation fall under three overlapping categories: health, climate, and finance.

For many years, gardens have been prescribed by doctors to improve patient conditions. Simply viewing plants or even images of them "reduced stress, fear, anger, and sadness, as well as reducing blood pressure, [heart] rate, and muscle tension" (Nakamura and Fujii). Due to these positive reactions, health centers such as St. Thomas' Hospital and St. George's Hospital (both in London, United Kingdom) have central gardens to improve patient wellness. The presence of plants has been correlated with reduced analgesic usage and shortened hospital stays. Given these de-stressing properties, it would be logical to have plants in our everyday lives even when we are not bedridden. Aside from increasing exposure to greenery, gardening is also a useful preventative measure against future illness. It is as calorie-intensive as a gym session while maintaining availability to all ages and economic statuses (the average gym

membership costs from \$40-\$70 in the United States). Cognitive health can also be sustained; gardening has been found to delay dementia, improve self-esteem, and positively contribute to one's mental health. During the Covid-19 pandemic, many people became self-taught horticulture enthusiasts. Their backyards provided a steady source of nutritious food despite supermarket shortages. Even after the pandemic, people continue to cultivate their plots of land and embrace its rejuvenating effects with open arms. But we are not the only ones being saved; the environment is reaping the rewards as well.

Even if you cannot see it, the cars whizzing by on the road are contaminating the atmosphere. In 2021, air pollution was responsible for 8.1 million deaths. It killed newborns and adults indiscriminately through heart disease, stroke, diabetes, and lung cancer. Just a couple years later, the death toll rose to 9 million (Health Effects Institute). But how is pollution relevant to gardening? As land development rapidly progresses, the once vast, natural landscape is now slipping through our fingers. Time and time again, climate advocates push to rehabilitate decaying habitats, but progress is too slow. By no means can one garden account for the multitudes of lost forests, but every effort counts. Plants are known to take in toxic gasses and convert them into breathable oxygen. In a garden, you could do just that, and also harvest and enjoy your life-saving crops (just make sure to replant them). It is like having your cake and eating it too, but the cake is actually healthy servings of fruits and vegetables. Aside from nourishing humans, plants also support their animal counterparts. In natural habitats, plants attract insects, especially pollinators to help them reproduce. These bugs serve as delectable morsels for predators, such as birds. These symbiotic relationships ensure that the ecosystem remains balanced and healthy. However, in city spaces, the presence of humans complicates the matter. Urbanization has decreased vegetation, especially native species, which has been leading to lower numbers of insects and in turn birds. Creating a biodiverse yard is crucial to a prosperous planet.

Despite its contributions to human health and the globe's ecosystem, there are still people who refuse to believe in gardening. What's the point of growing food if I can buy cheap vegetables without having to put in any work? This argument is riddled with holes and misconceptions. Initially, it does appear that gardening requires more capital given the setup expenses (planters, seeds, soil, etc.). However, compounded over many years, it is worth it. "The average household [spends] \$70 a year for seeds and garden supplies; but will reap \$600 worth of food" (Pugnetti). Although a personal garden will not be able to feed the whole family, it can still alleviate your grocery bill. In an economically bleak time, homegrown produce is a great way to avoid overstepping your budget. Here's an example: "one pound of organic tomatoes from Whole Foods costs \$3.29 as of June 2024, but a package of organic, heirloom tomato seeds that can yield multiple tomato plants over time, costs \$4.99. To put it into perspective: one

tomato plant may equal 10 lbs. to 30 lbs. of tomatoes" ("The Cost Effectiveness of Growing a Garden"). From my family's garden, we harvested peas, potatoes, green onions, and even pumpkins! In addition to the financial relief, creating your own supply chain insulates you from distribution holdups whether they are droughts, disease, or labor shortages. I have never seen a money tree, but I do have a convenient money garden in my backyard!

When the seed of agriculture planted its first roots into mankind, it was bound to thrive. Through many years of meticulous studying and cultivation, the art of horticulture slowly sprouted, revealing leaves and buds. But when it flowered, it never died; farming and gardening became forever intertwined with the development of mankind. It offers a variety of yields, from boosting one's wellbeing to maintaining the environment to reducing food prices, that are too favorable to forgo. I have never looked back since the first day that I planted my first potato in the wooden beds packed with dirt. Gardening is truly a wholesome experience to be enjoyed with dearly loved ones, be it your siblings, parents or grandparents. Next time when you pass by your local nursery, be sure to buy some supplies...and a few garden gnomes (they are believed to protect your garden and guarantee a good harvest!).

Works Cited

"The Cost Effectiveness of Growing a Garden." Investopedia,

https://www.investopedia.com/financial-edge/0312/the-true-cost-of-growing-a-garden.aspx.

Accessed 22 September 2024.

Health Effects Institute. "Air pollution accounted for 8.1 million deaths globally in 2021,

becoming the second leading risk factor for death, including for children under 5 years." Institute

for Health Metrics and Evaluation, 19 June 2024, https://www.healthdata.org/news-

events/newsroom/news-releases/air-pollution-accounted-81-million-deaths-globally-2021-

becoming. Accessed 29 September 2024.

Madden, Robert. "The Development of Agriculture." *National Geographic Education*, 5 January 2024, https://education.nationalgeographic.org/resource/development-agriculture/#. Accessed 22 September 2024.

Nakamura, Ryuji, and Eijiro Fujii. "(PDF) Studies on the Characteristics of Electroencephalogram, Especially of Alpha Rhythm Inspecting Plants of Pelargonium Hortorum Bailey "Sprinter Red" and Begonia Evansiana Andr." ResearchGate, 8 July 2020,

https://www.researchgate.net/publication/315135087_Studies_on_the_Characteristics_of_Electro encephalogram_Especially_of_Alpha_Rhythm_Inspecting_Plants_of_Pelargonium_Hortorum_B ailey_Sprinter_Red_and_Begonia_Evansiana_Andr. Accessed 29 September 2024. National Garden Bureau. "What Does Your Future Garden Look Like?" *National Garden Bureau*, 3 December 2020, https://ngb.org/future-garden/. Accessed 20 October 2024. Park, Seong-Hyun, and Richard H. Mattson. "Ornamental indoor plants in hospital rooms enhanced health outcomes of patients recovering from surgery." *PubMed*, National Institute of Health, 15 September 2009, https://pubmed.ncbi.nlm.nih.gov/19715461/#full-view-affiliation-1. Pugnetti, Phyllis. "23-01-29-Cost Saving Gardens 2023." *Wsu*, 2023,

https://s3.wp.wsu.edu/uploads/sites/2083/2023/01/23-01-29-Cost-Saving-Gardens-2023.pdf. Accessed 29 September 2024.

Shetty, Prakash. "A compilation of energy costs of physical activities." *PubMed*, 8 October 2008, https://pubmed.ncbi.nlm.nih.gov/16277826/. Accessed 22 September 2024.

Thompson, Richard. "Gardening for health: a regular dose of gardening." NCBI,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6334070/#R11a. Accessed 22 September 2024. "U.S. lawn and garden participation 2020." *Statista*, Statista Research Department, 7 May 2024, https://www.statista.com/statistics/715482/us-lawn-and-garden-participation/. Accessed 22 September 2024.