What draws us into, and reinforces, our gardening practices? Is it an intellectual reward, the quest for new understanding? Is it a delight of different sensory experiences calling us back for more? Or, is it an emotional stimulation/reward?

Is it a sense of accomplishment? Is it an act of frugality? Is our love for gardening an expression of our deep appreciation for “nature’s bounty” and endless reward?

Is it out of reverence for the Divine, the sacred life-giving energy of nature, writ both large and small? Or maybe, more pragmatically, what draws us to the act of gardening are the plants and flowers we grow, the fruits and vegetables that we tend to and cultivate?

Or, maybe, it is the black dirt of new compost that we generate and spread, a symbol of renewal and rebirth? In the presence of this new black soil, our soil, we are in awe of the world: our flowers are more beautiful, the fruit crisp and sweet, the veggies fresh and flavorful… and the dirt itself, don’t forget the dirt: old, clean, new, full of death and life, decay and rebirth.

For me, it’s the dirt. Though I am still very much an amateur, I’m hooked. Dirt. Black gold. The tomatoes are nice too.
Today, I want to discuss a little bit of the history of philosophy, and link this with what I take to be a significant achievement in the field of environmental ethics: Aldo Leopold’s Land Ethic.

I will suggest that an essential part of Leopold’s Land Ethic requires the development of what he called an “Ecological Conscience” that can also be understood in terms of the development of a kind of “felt” sense of obligation to the larger land community. I will suggest that the act of gardening develops this very capacity for a “felt” connection to the land. In many respects, this breaks with traditional philosophical approaches to ethics. Perhaps it is no coincidence that Leopold was not trained as a philosopher, yet his contributions are among the most significant in the field of environmental ethics.

In the opening passages from “February – Good Oak” in Aldo Leopold’s *A Sand County Almanac*, we find this warning and advice:

“There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other is that heat comes from the furnace. To avoid the first danger, one should plant a garden, preferably where there is no grocer to confuse the issue. To avoid the second, he should lay a split of good oak on the andirons, preferably where there is no furnace, and let it warm his shins while a February blizzard tosses the trees outside.”

So, what connects us with this activity – gardening – this craft, this techné? What keeps us coming back for more? As a trained philosopher, my mind focuses on three main types of answers:

A. The stimulation/reward is *intellectual*: it is a stimulation of our powers of reasoning, the inferences we draw and the patterns we decipher through the use of our cognitive faculties.

B. The stimulation/reward is *sensational*: it is a stimulation of our sensory modalities, the rich diversity of different scents, sounds, flavors, textures, and sights.
C. The stimulation/reward is emotional: it is a stimulation of our feelings, excitement of our sympathies, the exercise of intuition, and the urgency of action.

Breaking with philosophical tradition (which is full of lopsided dichotomies), I think that these are all sources of knowledge, ways of knowing the world around us, and ways of knowing ourselves.

The first way of knowing is heady, clean, rational – the mind generates “knowledge that.” Some might say that this kind of knowledge (and knowing) is detached, abstracted, and cold. Good technical manuals are written in this way: the facts, please, and in workable order and organization.

The second and third ways of knowing are bodily, dirty, they are felt – the body generates “know how” (a skill, an ability) and “acquaintance knowledge” or “knowledge of” (a place or a person). Some might say that this kind of knowledge (and knowing) is embodied, concrete, and alive with messiness. Skill knowledge does not always translate into nice and neat sentences. And acquaintance knowledge is something you feel in your bones.

I think about John Muir’s written reflections about the Hetch Hetchy Valley, and his intimate acquaintance for that landscape certainly comes through, at least to some degree.

Again, breaking with philosophical tradition, I believe that none of these ways is necessarily better. Each has its role in a complete human; certainly each has its place in a gardener.

Gardening is an activity (Perhaps it is a complete way of life?) that receives reinforcement from many realms: the mind, the senses, and the emotions. And I think this is exactly what is so appealing about gardening: it is intellectually rewarding, it is full of sensory stimulation, and it is emotionally engaging. And certainly the act of gardening builds a community (a community of botanical delights as well as human communities).
Historically, however, philosophy has not been kind to the senses and the emotions, or the body in general, as a source of knowledge. Consider the philosophers known as the “rationalists” – those who valued reason above all else as a source of knowledge, and as an organizing principle for one’s entire life.

Both Plato (427-347 BCE) and Rene Descartes (1596-1650) famously reject the senses, viewing the senses as a source of error and deception. Preference was given to reason (and reason alone). Immanuel Kant (1724-1804) was a beacon of regularity and discipline, who would take the same walk every day at the same time (people were said to set their watches by his passing). Kant traveled no more than 50 miles from his birthplace. Kant located The Real World in the realm beyond sense experience, a realm beyond the strictly physical, chemical, biological, or botanical.

I am willing to venture a biographical guess about Plato, Descartes, and Kant: they didn’t tend gardens. And what if they had? Well, I suspect the history of philosophy would be different.

Interestingly, Kant also rejected the place of inclination or desire as a source of moral or ethical motivation. Kant tells us, in no uncertain terms, that right actions must be motivated out of deep (intellectual) respect for the universal “moral law” (itself an intellectual abstraction).

So, if you help a family member pick berries, or assist a neighbor with a new compost bin, out of love or sympathy or admiration, your action lacks moral worth. According to Kant, ethical actions must be performed with cold emotionless detachment.

So much for the rationalists.

What about the other dominate group: the “empiricists”? Let’s add John Locke (1632-1704) and John Stuart Mill (1826-1873) to the mix: empiricists are those who hold the view that all knowledge is based on the senses (that no idea exists in the mind without first passing through the senses).
The senses, however, are merely tolerated by the empiricists – the senses are not fully embraced, not fully valued. Why? Well, it is still the mind that occupies center stage, where the collection, recombination, and interplay of ideas takes place. The senses are simply the passive “input” for the good stuff further down the road: the active operations of the mind to discern patterns, predict new outcomes, and assemble ideas into new and novel forms.

So, even for the Empiricists, it is the mind (furnished with simple ideas by the senses) that is ultimately important – it is the mind that is the active force in assembling simple sense impressions into the complex ideas of justice, knowledge, morality, and language.

But, accepting the (limited) importance of the senses is a beginning. At least the Empiricists have included some aspect of our bodies! They seem to acknowledge (however cautiously) that we aren’t just disembodied minds floating around a dream world fighting off the temptations of the senses. With the senses in the picture, the empiricists ushered in the body and the messy study of sensory experience. At least the physical world was now impinging on us (in one way or another) via our senses.

And that was how many empiricists described it: the world was “impinging” upon our sensory organs, causing the development of sensation to enter the mind in the form of simple ideas.

But the body is “impinged upon” in other ways too, not just through sense experience: the body is “impinged upon” through the felt states of emotion, intuition, sympathy, anger, compassion, and love. However, the empiricists (generally) were not receptive to these things: they were considered to be suspect. Why?

Well, it was thought that these “felt” experiences or sensations were not the same as the passive channels of sensory experience. Sensory experiences were thought to deliver raw, uncorrupted ideas to the mind. The senses, in this way, were thought to be sterile transmission lines. So, the empiricists incorporated the senses (sensation), but not our felt sensations: the feelings of dread, love, fear, jealousy, and compassion were left out. These were of a different kind: they didn’t represent the world, but our own internal biases and proclivities.
One empiricist philosopher, however, broke ranks with other empiricists. Scottish philosopher David Hume (1711-1776) was one of the first philosophers to call attention to, and carefully study, the nature and complexity of our felt emotions, or what Hume called “the passions” or the “moral sentiments.”

Unfortunately, Hume’s treatment of the passions and the related notions of the “moral sentiments” is often neglected by philosophers. In these neglected passages, Hume offers a detailed account of such things as: pride, humility, love, hatred, the will, virtue, vice, shame, and other “felt” moral sentiments such as compassion, sympathy, modesty, and benevolence. In fact, as a result of his careful inventory of human passions and emotions, some credit Hume with being one of the first psychologists, and he is credited with initiating the science of psychology as its own realm of inquiry. [Side note: It was not until the 1890s that American Pragmatist philosopher William James published the first “textbook” of psychology: The Principles of Psychology.]

Hume referred to these “felt” sensations collectively as “the passions,” and explained how these form the basis for our fundamental concepts of morality, justice, and responsibility.

Hume also said, famously, that reason is the slave of the passions. That was the order of things for Hume, but not for many other philosophers. They were reluctant to place any credence in the felt moral sentiments, nor were they willing to adopt the view that reason took a back seat to the passions.

Hume seemed to know better, however: reason without passion goes nowhere (it lacks motivation, initiative). Of course, passion without reason is blind (it lacks direction, guidance).

Perhaps it was his affinity for ale, or backgammon, or flirting with the Ladies down in the courtyard… whatever it was, something kept Hume grounded squarely in his own skin, acknowledging the importance of reason, the senses, and the felt passions.
All of this lays the philosophical groundwork for understanding Leopold’s Land Ethic. From the beginning pages of *A Sand County Almanac*, Leopold emphasizes the importance of science (which is a blend of reason and experience) with emotion (love, sympathy, frustration, respect). Beginning with his systematic observations of particular organisms and the passing of the seasons, Leopold builds up to the penultimate philosophical expression of his Land Ethic: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

But there is a lot of work leading up to this moral maxim, and to focus only on this maxim would be selling Leopold short. Importantly, Leopold discusses the extension of our ethical community to include more than just humans, but to also include the land (as a complex community of interdependent parts).

How is this extension of ethics achieved? Is it a purely intellectual achievement? Is it merely observational? Do we just “see” the ethical community after we study ecology long enough? No. For Leopold, the ethical community is extended to include more than humans via the development of an “ecological conscience.”

The ecological conscience is a complex notion, but it includes two important features.

**First**, an ecological conscience is a widespread re-orientation of values, beliefs, and attitudes (a paradigm-shift, in other words). With respect to the development of an environmental ethic or what he called a “conservation ethic,” Leopold says that

“No important change in ethics was ever accomplished without an internal change in our intellectual emphasis, loyalties, affections, and convictions.”

In part, this change is a shift from a purely human-centered view of ethics to a community-centered view. The community in question is simultaneously the biotic community *and* the ethical community. An ecological conscience, Leopold says, transforms our role from conquerors of the land to plain member and citizen of it.
Second, an ecological conscience also tells us that humans are in fact capable of caring for this extended ethical community precisely because it draws on the very same felt moral sentiments that drive our ethics in response to other humans. These felt moral sentiments ( "the passions") are the foundation of human-human ethics: they are the means by which we understand (and act upon) our membership in the ethical community.

By extension, Leopold understands that we can cultivate these moral sentiments so that they are triggered by a expanded notion of community: the biotic community.

The development of an ecological conscience, therefore, is the powerful basis for Leopold’s Land Ethic (and it draws its influence directly from Hume, even though Leopold is, for the most part, unaware of this philosophical heritage).

An ecological conscience involves a fundamental re-orientation of our ethical framework, while at the same time it cultivates and generates felt moral sentiments that motivate good, ethical actions (even toward something as seemingly abstract as "the land community" itself).

For Leopold, environmental ethics is not merely a matter of intellectual theorizing. Environmental ethics is also not matter of conducting more detailed observations. Environmental ethics surely includes both of these things, but it absolutely must include the development of the felt moral sentiments (sympathy, love, compassion) which serves as a "glue" for everything else.

In this way, not only is Leopold offering a holistic approach to ethics, he is calling for a holistic approach to the development of ethical citizens through the cultivation of a keen intellect, careful observations, and sincere feelings.

Leopold viewed ecological restoration as an important component of the Land Ethic as well. In fact, ecological restoration was one of the main activities that the Leopold family engaged in while visiting “The Shack” in Baraboo, WI. Today, the field of ecological restoration is diverse and widespread, complete with the formation of specialized research publications, official national and international societies, as well as community-based restoration groups.
At a recent conference (The Association for Practical and Professional Ethics, San Antonio, TX), I attended a presentation by philosopher Andrew Light (New York University, University of Washington) who detailed a number of recent restoration projects in urban areas. These projects were guided by scientists and non-profit agencies, and made considerable use of volunteers. The initial outcomes were quite promising: not only did the volunteers and scientists complete remarkable restoration projects, the participants reported that the experience had made the following changes:

(a) an increased intellectual appreciation for the complex interconnections found within the biotic community,
(b) an increased awareness of the diversity of life forms that make up a biotic community, and
(c) an alteration of their value system: participants noted that as a result of engaging in ecological restoration, they reported a corresponding willingness to change their own lifestyles so as to promote healthy biotic systems (especially those regions they were involved with directly).

In other words, engaging in ecological restoration seems to aid in developing exactly what Leopold called for: the development of an ecological conscience. The work brings about intellectual rewards (more extensive knowledge of the biotic community), sensory stimulation (new, richer experiences), and emotional engagement (deeper connections to nature, and powerful motivations to make changes in their lives).

And then, Professor Light said something I wasn’t expecting: that ecological restoration draws on the very same skill set as does gardening.

This blew me away! I think he is absolutely right. It was right there in front of me the entire time! Of course, of course! He could have been talking about gardening the whole time.

Like ecological restoration, gardening promises to change, in subtle ways, the very particular experiences we have – from the simplest appreciation for the complexity of nature, to the
willingness to make sacrifices in order to promote the well-being of the larger biotic community. This, I think, is exactly what Leopold had in mind when he spoke of the ecological conscience. The development of an ecological conscience is an on-going process that is transformative. These transformations of our ecological conscience leads to and is accompanied by:

1. New recognition/identification of specimens, species, and relationship between the parts of the natural world. This is intellectually rewarding.
2. New sensory experiences: a richer, more detailed set of sensory experiences This is perceptually stimulating.
3. New felt moral sentiments: compassion, sympathy, and motivation. This is emotionally engaging.

Like the science of ecology (as in integrative discipline), an ecological conscience re-unites parts of our selves that were historically and philosophically separated. As a result, the self (mind, senses, and emotions) becomes united in a kind of dynamic integration.

So, when we garden, we tend to and cultivate much more than plants, veggies, fruits, flowers, and soil. We are cultivating our selves… our ecological selves… our ecological conscience. In turn, we are cultivating the communities to which we belong: the biotic community and our human communities.

This is perhaps the most philosophical project we can take on in our lives, which is to follow the advice given to all visitors to the Oracle at Delphi: know thyself. Socrates took this advice to heart. It guided his entire life. I believe that it is the advice Leopold followed, too. For Leopold, it might be better to think of this as the ecological self. The spirit of the advice is largely the same.

This advice is echoed in the Ancient Greek notion of Paideia, which refers to the aim or goal of education. According to the Greeks, the aim or goal of education is not mastery of some subject area, or familiarity with some set of specialized facts, or mastery of some set of technical skills.
Rather, *Paideia* is the holistic notion that the aim or goal of education is *mastery of one’s self* or *development of one’s person*.

Ecological *Paideia* might be understood as the holistic cultivation of an ecological conscience, or the development of one’s ecological self. Socrates faced an incredibly important holistic question: how should I live my life? And his equally holistic answer: through the activity of examining ethics, beauty, truth, justice, and politics.

To this answer, Leopold can be understood as adding the activity of ecological restoration. And I think it is a safe bet to include the activity of gardening as well.