

# Ecological Restoration as Public Spiritual Practice

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## Abstract

The practice of ecological restoration is the attempt to repair ecosystems that have been damaged or degraded, most often by past human activities. Restoration includes everything from removing dams to planting native trees, grasses and wildflowers to bio-reactivating soil to controlling invasive plants to recontouring land. Beyond this, ecological restoration is the attempt to restore humans' relationship with nature. In the actual activities of restoring land, humans are in important ways restored to land. This paper argues that one of the ways in which restoration practice reconnects humans to nature is in a spiritual-moral sense. In addition to performing ecological work, restoration performs sacred work and serves as a form of public witness; and it can engender spiritual-moral experiences within participants. For these reasons, we can view restoration not only as a promising contemporary environmental practice, but also as a burgeoning public spiritual practice.

## Keywords

ecological restoration, environment, ethics, spirituality, religion

What restoration could and should be for in us is the transformation of our souls. In addition to what this work may accomplish in the land, I yearn for it as the yoga that will cause us to evolve spiritually, that will restore to us a feeling of awe in something besides our own conceits.

—Stephanie Mills

Environmentalists have long linked the modern environmental crisis with a crisis of the human spirit—of consciousness, the personal heart, or soul. Some thirty years ago Wendell Berry called the ecological crisis a crisis of

character (Berry 1977). More recently, Christian theologian Mark I. Wallace writes that the global environmental crisis “*is a matter of the heart, not the head...* we no longer experience our co-belonging with nature in such a way that we are willing to alter our lifestyles in order to build a more sustainable future” (Wallace 2005: 27). What we need to do, proposes social ecologist, Stephen R. Kellert, is “address the roots of our predicament—an adversarial relation to the natural world—and find a way to shift our core values and worldviews not just toward the task of sustainability, but toward a society with a meaningful and fulfilling relationship with the creation” (Leiserowitz 2007: 61).

The question, of course, is what on earth is going to bring about the transformation that is needed; what is going to help us, once again and anew, find our place and purpose within this beautiful, prolific Earth? One response that has been frequently overlooked by scholars of religion, theology, and environmental ethics is that of ecological restoration. Ecological restoration is the attempt to repair ecosystems that have been damaged or degraded, most often by past human activities.<sup>1</sup> Restoration activities include everything from removing dams to planting native trees, grasses and wildflowers to bio-reactivating soil to controlling invasive plants to shifting banks and contours of land. Projects range from multi-million dollar efforts to restore wetlands, woodlots, or soils on former industrial Brownfield sites in urban areas to the reintroduction of tall grass prairie ecosystems in various communities in the Midwest to the rehabilitation of salmon streams and rivers in the Northwest to the replanting of native beach, wetland, and sea grasses along Louisiana coastlands—and everything in between.

Beyond this, ecological restoration is viewed as a way to heal humans’ relationship with nature.<sup>2</sup> Through the actual activities of repairing degraded land—reintroducing, replanting, ripping out, recontouring and so on—persons can become, in important ways, restored to land. In its metaphysical understanding of the fundamental connection between culture and

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<sup>1</sup>) The science of ecological restoration (termed *restoration ecology*) includes various fields such as conservation biology, geography/landscape ecology, wetland management, rehabilitation of resource-extracted lands, and adaptive ecosystem management. Ecological restoration as a movement, however, is the total set of ideas and practices, scientific, social, political, ethical, aesthetic—I would add spiritual—that is operative in restoration projects. It is this second view of restoration that I mostly rely upon here. See Eric Higgs (2003).

<sup>2</sup>) On this idea see Andrew Light’s “Restoring Ecological Citizenship” and Daniel Spencer’s “Restoring Earth, Restored to Earth: Toward an Ethic for Reinhabiting Place.”

nature, and through its activity which provides a practical bridge between humans and nature, ecological restoration is seen as providing a promising, ethical model of human living with land (Light 2006).

An element of restoration practice that has received surprisingly scant systematic attention is its capacity for reconnecting humans with nature in a spiritual-moral sense. I say that this is surprising because restorationists themselves employ spiritual, moral, and even at times religious language to describe what is happening on the cultural-symbolic and personal-experiential levels in the process of restoring damaged land—terms such as redemption, communion, salvation, and sacred, for instance, dot scientific and poetical restoration writings alike. Additionally, restoration provides an interesting and distinctive example of the way in which science and spirituality, the secular and sacred interact in contemporary life to promote a more cooperative and meaningful relation between humans and nature.

This essay argues that the practice of ecological restoration holds inherent potential to reconnect humans with nature in a spiritual-moral sense. To this end I do three things. First I ask whether there are particular features of restoration practice that are critical for engendering spiritual-moral meaning and experience in relation to nature. Next I propose some ways in which the act of restoration itself can reconnect persons with nature in practical and symbolic ways. Finally, I examine some of the actual spiritual-moral experiences of transformation and renewal that restoration activities inspire within participants. While this essay will not be able to cover all of restoration's spiritual-moral dimensions, the hope is that it will begin to conceptualize restoration practice as a public spiritual practice that holds inherent potential to meaningfully, spiritually and morally, reconnect humans with nature.

### **Restoration as Public Participatory Practice**

The idea that restoration can reconnect humans with nature in a spiritual-moral sense requires that persons are, in fact, participating in restoration efforts. Public, volunteer participation in restoration projects, however, is not always present. Since much restoration activity today requires a certain amount of scientific and technical knowledge as well as skilled engineering and design input, restoration is often performed by restoration firms or government agencies with a cadre of professional scientists and

conservation practitioners.<sup>3</sup> As former president of the Society of Ecological Restoration (SER) International, Eric Higgs argues, ecological restoration today runs the risk of “technological drift,” that is, of becoming a predominantly scientific-technical practice dominated by experts and technicians (Higgs 1997, 2003).

In addition to Higgs’ fear of technological drift is the worry that restoration will become a rationalization and justification for natural resource extracting corporations to exploit nature *carte blanche*. This was in fact one of the fears that motivated the early arguments of philosophers Robert Elliot and Eric Katz against ecological restoration as an environmental policy recommendation—“If we strip mine it, we can put it back, recreate the mountain-top, replant the trees, reintroduce the animals, re-dig the lakes and rivers,” or so skeptics feared the rationalizing would go.<sup>4</sup> Restoration would become a fancy (or perhaps brute) economic justification for massive corporate destruction of nature. Along these lines, restoration was an exemplary form of technological hubris, according to Katz; a “big lie” that humans could ever put back the natural value that was destroyed in the first place.

In order to counter this sort of thinking (and acting), Higgs and Light have offered a series of arguments, including the view that “good” or “excellent” restoration must include consideration of values besides scientific and technical ones.<sup>5</sup> For example, Light argues that “good” ecological restoration requires that moral value is added in addition to natural value in the implementation of a particular restoration project. In addition to creating, for instance, ecological integrity (natural value), a good restoration project will also promote ways for persons to actually reconnect with (preferably local) nature, namely through public participation in restoration projects (social or moral value).

This is not to say that professionals and experts are not needed in restoration projects. In fact professionals are almost always involved in some way in restoration projects; the mix of scientists, practitioners, activists, and volunteers creating one of restoration’s unique aspects as a contemporary environmental practice. Yet there are certain social or moral values

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<sup>3</sup>) This has been a large debate within the literature. See Light on professionalization of restoration (2000a), and Higgs on the “two-paths” of restoration (2003).

<sup>4</sup>) See Robert Elliot, “Faking Nature” (1982) and Eric Katz, “The Big Lie” (1992).

<sup>5</sup>) See, for example, Light and Higgs (1996).

that restoration practice creates—i.e., reconnecting persons with nature through hands-on experiences, promoting a sense of care for particular landed places—that can only be accomplished through a certain level of volunteer, public participation in a project (Light 2005). Moreover, as Light proposes, public participation in restoration projects has the potential to foster “ecological citizenship” and a “democratic culture of nature,” that is, a culture where persons are engaged with building “a stronger human community that not only takes into account, but is actively inclusive of, concerns over the health, maintenance and sustainability of larger natural systems” (Light 2005: 8).<sup>6</sup>

With this public participatory type of restoration in mind, I now turn to explore some of the ways in which restoration activities can create larger symbolic meaning, even spiritual-moral meaning among those who engage its practices as well as within society.

### **Restoration Work as Sacred Work and Public Witness**

There are at least two characteristics of restoration practice that contribute to its potential to create spiritual-moral meaning and experience in relation to nature and its restorative care: the actual practical work of restoring damaged land, and the larger symbolic work that such activities perform.<sup>7</sup> Not only are the daily (or weekly or seasonal) activities of restoration work “just the work that needs to get done” as one Vermont restorationist told me, they also oftentimes signify and mean much more than that, both to restorationists themselves as well as to the broader community and society.

In the first place, the spiritual-moral experience and meaning that restoration practice enables begins in the practical ethical action of restoring nature itself. It is through the actual hands-on activities of restoring land—ripping

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<sup>6</sup> Despite the “technological drift” in restoration activities that Higgs legitimately worries about, many restoration projects today utilize considerable numbers of volunteers. For instance, the Midewin National Tallgrass Prairie project in Joliet, Illinois, the former site of the Joliet Army Ammunition Plant which required extensive clean-up from contamination from decades of TNT manufacturing and packaging, relies heavily on volunteers to maintain over 15,000 acres of tall grass prairie. And the restoration project of the social-environmental justice oriented Common Ground Collective in New Orleans has relied extensively on volunteers from the community to restore coastal wetlands.

<sup>7</sup> I am indebted to Gould’s analysis in her chapter, “Homemade Ritual,” in helping me to develop this point and the argument that follows. See Gould (2005: 63–101).

out, replanting, reintroducing, rebuilding, reactivating, and so on—that persons experience restoration's transformative potential. "Acts transform people, and this act [of restoration] transforms people in a particular way," writes William Jordan III, one of restoration's visionaries, and longtime past staff member of the famed University of Wisconsin Arboretum at Madison that Aldo Leopold initiated in the 1930s (Mills 1995: 125).

The idea that acts transform people is, of course, not a new idea. Aristotle and later Aquinas wrote about the concept in relation to their virtue theories, and, in particular, in relation to how moral virtue is formed within persons through the habituated performance of this or that virtuous act. Similarly, restoration practice involves activities (i.e., careful, patient observation) that, for instance, help persons become attentive to land's distinct history, features and functions (i.e., Chicago Wilderness volunteer restorationists will oftentimes send email messages with long lists of native and invasive plants, all identified by scientific name); give them a deep understanding of how much more time-consuming, costly, and difficult it is to repair ecosystems than it is to degrade them; and form newfound confidence and trust in the self-healing capacities of ecosystems when they are given a chance to recover.

But what more can we say about the particular way in which the act of restoration creates larger symbolic meaning, perhaps even spiritual-moral meaning in relation to nature and its healing? Jordan continues,

[The act of restoration] gives [people] a basis for commitment to the ecosystem. It is very real. People often say, we have to change the way everybody thinks. Well, my God, that's hard work! How do you do that? A very powerful way to do that is by engaging people in experiences. It's ritual we're talking about. Restoration is an excellent occasion for the evolution of a new ritual tradition (Mills: 125).

Jordan's notion of a restoration as a "new ritual tradition," as well as my use of the concept "public spiritual practice," can be helpfully illuminated by expanding on Mills' reference above to the spiritual practice of Yoga in relation to restoration.<sup>8</sup>

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<sup>8</sup>) William Jordan III has been the main proponent of the idea that the practice of ecological restoration can be seen as a potential, new ritual tradition analogous to that of the world renewal traditions of, for instance, the Australian Aborigine annual tradition of "singing the world back into being." Additionally, Jordan along with others, have viewed performance

Similar to Modern Yoga, the spiritual practice of restoration can be understood as secular or “public” in nature. Yoga scholar Elizabeth de Michelis, for instance, proposes Modern (Postural) Yoga as a “healing ritual of secular religion”—one that can offer “some solace, physical, psychological or spiritual, in a world where solace and reassurance are sometimes elusive” (2006: 251, 60).<sup>9</sup> And this no matter what ones existing (spiritual, religious, or secular) beliefs and commitments. Restoration too can be understood along these lines. Though given its scientific-ecological orientation, as well as its enactment “out in the open”—in the fields, forests, woodlots, and wetlands of society—it is more apt to call restoration a “healing ritual of public ecology;” or, as I call it a “public spiritual practice.”

Additionally, Yoga and ecological restoration serve as secular or public spiritual practices in terms of their capacity for creating meaning in persons’ lives, meaning that is formed in and through the practice’s actual, embodied activities themselves. In relation to Yoga, Joseph Adler writes, for example, that “the possibility of transcendence is dependent on Life itself, as Life is experienced through the body by a person who practices Yoga” (2004: 239). In restoration’s case, persons are drawn into and experience nature’s relentless life-force and capacity for regeneration. Restorationists find meaning, a home, within particular ecosystems and their slow, self-healing ways. Further, Yoga and restoration importantly form meaning and a sense of belonging through the development of “shared communities of practice” (Strauss 2005). Where practitioners interpret the work in spiritual terms—for “there is room for the practitioner to decide whether to experience her practice as ‘spiritual’ or as altogether secular” as de Michelis points out—restoration, as well as Yoga, can be seen as “shared communities of spiritual practice” (2004: 251).<sup>10</sup>

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and ritual (i.e. artwork, festival, celebration, etc.) incorporated within restoration projects themselves as positively contributing to restoration’s capacity for meaning making and community building. See Jordan (2003), Holland (1994), Lambert (2000), and Palamar (2004).

<sup>9)</sup> “Modern Yoga,” states de Michelis, is “a technical term to refer to certain types of yoga that evolved mainly through the interaction of Western individuals interested in Indian religions and a number of more or less Westernized Indians over the last 150 years.” Thoreau, according to de Michelis, appears to be the first Westerner to affirm himself (in 1849) as a yoga practitioner (2004: 2).

<sup>10)</sup> The notion of ritual (and religion and spirituality) has been a somewhat contested topic within certain restoration circles. This is especially the case for those restorationists who want their ecology “straight,” or otherwise find the notion of ritual as “eccentricity at best and quasi-religious at worst” (Meekison and Higgs 1998).

With this in mind, I make two points regarding the particular way in which restoration practice, conceived as public spiritual practice, can create spiritual-moral meaning in relation to nature and its restorative care. Both reflect ways in which restorationists themselves describe restoration practice's larger meaning; additionally, both have been underdeveloped within restoration thought.

First the practical work of restoration can be understood as sacred work. Catherine Bell's notion of "ritualization" proves helpful here. According to Bell, ritualization is "a way of acting that is designed and orchestrated to privilege what is being done in comparison to other, more quotidian activities... [It is] a matter of variously culturally specific strategies for setting some activities off from others, for creating and privileging a qualitative distinction between the 'sacred' and the 'profane'" (Gould 2005: 68).

In the practice of restoration, it is the case of setting off and privileging the acts of restoration as qualitatively "good" and meaningful activities in themselves, in contrast to say, sitting and watching television on a Saturday afternoon or going shopping at the mall. And while one can scarcely get more "quotidian" than clearing brush, sorting seeds, planting trees, weeding, collecting water samples, these activities are raised to the level of the "good" and meaningful work of restoration.<sup>11</sup>

But what is it more exactly that makes such acts good and meaningful, perhaps even "sacred" in restoration's case? What makes restorationists in the Volunteer Stewardship Network of the Chicago Wilderness Project, for instance, say that restoration work is "right up there" with raising children and making art, "more important to a lot of people than their jobs," as Laurel Ross, the network's coordinator says (Mills 1995: 144)?

On the one hand, we might say that restoration activities are thought of as "good" because they are activities necessary for repairing damaged ecosystems; they are good, in other words, because they promote ecological health. Yet there are additional reasons that restoration activities can be viewed as good, meaningful, even sacred activities.<sup>12</sup> In the first place, restorative acts are thought of as good and meaningful because they put persons in close connection with nature—and more specifically, close connection with nature in a particular way, that is, a participatory, active way;

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<sup>11</sup>) Gould makes a similar point in relation to homesteading.

<sup>12</sup>) In one empirical study of 306 restorationists in the Chicago Wilderness project, for example, the satisfaction categories of A CHANCE TO BE AWAY, MEANINGFUL ACTION, and



in the second place, they are thought of as good and meaningful because they put us in close contact with other persons—and more specifically, with other persons performing the particular ethical action of restoring nature. As Marty Illick, director of the Lewis Creek Association in central Vermont, said to me over lunch at her house along the Lewis Creek: “It is the most uplifting thing. We are really just high being out there in nature, working with a small group of people.”

There are certain acts within every restoration effort that take on especially privileged, sacred meaning relative to a specific type of restoration. For instance, in salmon restoration, the collection, fertilization, and incubation of eggs, and the killing of the female salmon that such necessitates, are seen as especially meaningful, sacred acts. On this, Freeman House writes:

Each of us has performed this rite [of killing the female salmon to collect and fertilize her eggs] a number of times before, but it never ceases to be weighted with nearly intolerable significance, the irreducible requirement to do it right... Everything is ready. Gary [the fish biologist] measures a few teaspoons of the anesthetic into the tank... Stevie [a resident volunteer], nearly dancing with anticipation, runs to the holding tank once Gary tells him we are ready, lifts the New Year's female out of the water in her tube, and rushes her down to the drugged water in the stock tank... I have handed the ironwood club to Stevie... The club comes around... [and] connects solidly at the back of her head, just behind her eyes. She shudders for a moment and is still... [Gary] hands her to David [volunteer], who waits while I scramble for one of the white buckets. Each of us is muttering cautionary instructions to the others, *careful, careful, head down, head up, don't drop her now*. No one hears. We have moved beyond our nervous ambivalence at the arrogance of our intention and are wholly occupied by the ritual. (House 1999: 101-3)

Once the female salmon is cut open, her ripe pink-orange eggs released into the white bucket, white fertilizing milt of the male mixed in with them, House writes this: “I lower the fingers of one hand into the heart of creation [the egg, milt mixture] and stir it once, twice. For a moment my mind is completely still. Am I holding my breath? I am held in the thrall of a larger sensuality that extends beyond the flesh” (House 1999: 104). In this particular restorative act, the “intolerable significance” of doing

it right, biologically speaking—capturing the female, releasing the eggs, squirting the milt, mixing the mixture and so on—takes on symbolic, ritual significance, sacred significance. Ecological act has, in a sense, become sacred act; scientific work, spiritual work.

Another way in which restoration practices become more than “just the work that needs to get done” is that restoration activities enact, indeed attempt to create the way things ought to be in the face of the way things currently are.<sup>13</sup> In this way, restoration practice functions as a form of “public witness” to the collective moral failure of industrial society to live more respectfully and harmoniously with land.<sup>14</sup>

Unlike other forms of environmental and religious “witnessing,” however, the public witness of restoration occurs most often, implicitly, through the activity of restoring nature itself, rather than through direct action or civil disobedience. For example, the witness to the societal “sin,” if you will, of the massive destruction of the tall grass prairie ecosystem throughout the Midwest (one percent of the original 1,000,000 acres remains) comes for restorationists not through hammering on or “monkey-wrenching” the two ton tractors and combines of farmers who have historically been the ones to plow and till under the prairie. Rather, it comes through the action of regenerating and returning—giving back—prairie to the region.

The five acre tall-grass prairie plot at my children’s elementary school, for instance, while small, nonetheless makes a public statement, a public witness, to the fact that it was not good, is not good—ecologically, aesthetically, morally, spiritually, and probably even economically in the long term—to create a landscape entirely dominated by a mono-culture of nitrogen intensive cash crops. And the spiritual and moral meaning and import of such a witnessing action is one reason why planting the prairie at the school, at least at the project’s outset, caused no small amount of consternation in a community, small and farming-based, which still in large measure thinks negatively about the prairie ecosystem (“We’ve been trying to rid of those damn weeds for a hundred years, and now you want to bring them back?”). For at one level, some farmers saw even this little

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<sup>13</sup> Jonathan Z. Smith writes that “ritual is, above all, an assertion of difference . . . a means of performing the way things ought to be in conscious tension to the way things are” (Gould 2005: 63).

<sup>14</sup> On the notion of “public witness” within environmentalism see Gottlieb (2006:166-7).

plot of prairie as a moral indictment of their way of life and work, and more generally, of the American achievement of agricultural progress.

Aldo Leopold spoke to this broader symbolic meaning of restoration in his 1934 dedicatory remarks of the 1,200 acre Arboretum at the University of Wisconsin—the birth place of the modern study of restoration ecology. At the dedication, Leopold said this:

If civilization consists of cooperation with plants, animals, soil, and men, then a university which attempts to define that cooperation must have, for the use of its faculty and students, places which show what the land was, what it is, and what it ought to be. This arboretum may be regarded as a place where, in the course of time, we will build up an exhibit of what was, as well as an exhibit of what ought to be. It is with this dim vision of its future destiny that we have dedicated the greater part of the Arboretum to a reconstruction of original Wisconsin, rather than to a 'collection' of imported trees.

I am here to say that the invention of a harmonious relationship between men and land is a more exacting task than the invention of machines, and that its accomplishment is impossible without a visual knowledge of the land's history (Flader and Callicott 1991: 210-11, cited first in Mills).

In a letter to the American conservationist William Vogt, Leopold wrote that "the idea of a restorative relationship with the land is incompatible within the drives of industrial civilization; one insists that we discover and respect the order of nature, the other urges us to triumph over it" (cited in Worster 1993: 180). Yet Leopold himself was engaged in restoration projects such as the one just cited, as well as the one he personally initiated with his family at his dust-bowled out farm in Sand County.

And herein lies one of restoration's most hopeful aspects—which is that it does in fact create restorative relationships between and among persons and land, despite and in the midst of the current "drive of industrial civilization." There still is room, restoration work reminds us, to attempt to respect the order of nature, to learn how to live more harmoniously, more meaningfully, more beautifully with land. We can come to know a particular landed place and be drawn into its slow, self-healing ways. Land, if given the chance, will come back to prolific, thriving, wild life. Our spirits, our hearts can be transformed and renewed in the midst of fragmentation and degradation. We really can "touch the sacred with our hands."

## Restoration of the “personal heart”

The heart of restoration’s capacity for reconnecting persons in a spiritual-moral sense with nature is perhaps seen most clearly in the actual experiences of transformation and renewal that restoration activities engender within the recesses of the human self.<sup>15</sup> As with restoration of land, the notion of healing is central to restoration inspired spiritual-moral experience. The restoration of the personal heart is, in a sense, a healing of the personal heart, both in terms of the healing that takes place within the recesses of the human self, consciousness, heart, or soul, as well as the healing that takes place between the self and nature.

In part, the notion of healing becomes central in the spiritual-moral experience of restorationists because the nature that is encountered and relied upon as a source of spiritual insight and meaning-making is, to varying degrees, a despoiled, degenerated, polluted, and disturbed nature—a nature in need of healing. The nature of the restorationist is not the nature of Muir’s Sierra Nevadas or Thoreau’s Walden Pond. And while we may agree with Bill McKibben that the era of “nature” untouched by human activities has ended, the nature that restorationists oftentimes encounter and rely upon as a source of spiritual-moral experience has *really* almost ended. Still it is also the case that the nature that restorationists are healed by is a nature that is coming back, that is recovering, that is healing itself, slowly but surely. This raises an important question: how, if at all, does working with a wounded, yet self-healing nature shape the types of spiritual-moral experiences that restoration practice engenders?

In the first place, restoration activity can enable a de-centering, or loss, of the self that comes through the realization that humans are dependent on and interdependent with larger Nature. An important part of this de-centering is the feeling of human limitation, and, in turn, humility that restorationists often experience. Restorationists perform their work with the dual, at times tension-ridden, realization that while humans are part and parcel of and play an active role within the natural order of creation (in this case, as restorers of it), there are also differences between us and Other nature that make living in true communion with it troublesome and difficult, existentially and practically. On this tension, for instance,

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<sup>15)</sup> Rebecca Gould uses the terms “transformation and renewal” to describe the personal experiences of modern homesteaders that she studied in Vermont (2005).

House reflects: “King salmon and I are together in the water . . . It is a large experience, and it has never failed to contain these elements, at once separate and combined, empty-minded awe; an uneasiness about my own active role both as a person and as a creature of my species; and a looming existential dread that sometimes attains the physicality of a lump in the throat . . .” (House 1999: 13).

Related to this sense of existential dread, House writes later about the “hard knot of relationship in the act of killing a creature of another species,” specifically in House’s case, female spawning King Salmon whose eggs were to be taken for fertilization, incubation, and future reintroduction into the river. The act of killing other creatures or parts of nature, and the “hard knot of relationship” that this produces, is a necessary component of any restoration work (i.e., burning grasses, pulling, cutting back and removing invasive species, and so on). It is a troublesome aspect of our relationship with nature, one that modern industrial culture, as well as the contemporary environmental movement, has not adequately dealt with as restorationists often point out. Yet it is also one, as both House and Jordan suggest, that is fundamental to our relearning “how to celebrate the true nature of the relationship [between humans and the natural world]” (House 1999).

Restoration practice therefore oftentimes forms a deep sense of humility in relation to larger Nature, enabling the realization that “the process [of nature’s healing] is not solely in our hands; we have a part to play, but the power to restore belongs to Nature” (Mills 1995). “It’s not about control,” say the prairie restorationists in Chicago, “but about surrender;” not about imposition, but about being “drawn into the slow beauty of the self-healing nature of living places” (Mills 1995, House 1999).

Paradoxically, while restoration yields a de-centered sense of self within, it also can form an expanded sense of self in relation to nature. On the one hand, this can be understood in terms of Arne Naess’s notion of the ecological self whereby persons come to view and experience themselves as continuous, in some sense, with Nature. Yet Naess’ notion of the ecological self is nuanced in restoration’s case, for restoration is an attempt to “make way” for ecological selfhood to be more readily possible in this (modern industrial) life. The creation of a restorative ecological selfhood in the present requires a healing from the “scythe that went too far” in the degradation and destruction of ecosystems in the first place. The healing action

comes not only in giving back to nature that which was (in many instances, wrongly) taken, a type of redemptive “penance” as Jordan writes for the expiation of ecological sin; but also, in turn, a “living into the forgiveness” of Nature’s self-healing ways, “to say a thank you audaciously for the future” by making ecosystems as beautiful, healthy, and whole as we possibly can.<sup>16</sup>

The restorative ecological self, then, represents for the restorationist a type of wholeness in the midst of brokenness, an attempt to find “wholeness in a fragmented land,” as Janisse Ray’s book, *Pinhook*, on the restoration of the Pinhook Swamp is subtitled (Ray 2005). In this way there is a sober celebratory spirit of trust and hope among restorationists that communion and belonging in relation to land is in fact possible.

And restorationists oftentimes do in fact describe a sense of communion with other human beings and nature. “A special communion forms when people literally dig into the earth to reverse a tide of degradation, atone for past actions, seek a new way of relating to things other than human, or enjoy the pleasure of good company and good work,” writes Higgs (Higgs 1997: 342). Where restoration is of a landed place that holds particular meaning for those attempting to restore it, persons gain a deepened sense of belonging to their “life-place.” They are enabled “to attach to the space, embrace the spirit, and find personal meaning within that reciprocal relationship” (Thayer 2003: 72).

Restoration therefore has the capacity to engender deep feelings of satisfaction, fulfillment, hope, and even love, however tempered at times by those of guilt, loss, lament, and even anger at the human degradation of ecosystems. Feelings such as these are, in fact, an important reason why restorationists remain engaged in the work; restoration can be extremely fulfilling, if difficult and patient, work. Restoration projects, of course, vary in terms of the particular ecosystem’s level of degradation and toxification—accordingly, the sorts of feelings that restoration activities inspire in relation to (variously degraded and healing) nature differ.

Illick’s comment regarding being “high” in nature, working with a small group of people, was rendered, for instance, during a sunny Saturday

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<sup>16</sup> These two phrases, “the scythe that went too far,” and “to say a thank you audaciously for the future” come from Cindy Goulder’s poem, “Volunteer Revegetation Saturday.” Cited in Jordan (2003).

morning volunteer workday pulling invasive weeds on a local lake in rural Vermont. In this particular case the lake's level of degradation was relatively benign, and the natural setting in which Illick and others were working was, by most standards, beautiful. It is not difficult to see how Illick described such uplifting feelings in this context.

On the other hand, many restoration projects involve working with much greater levels of degradation and pollution. Consider the Acid Mine Drainage and Art (AMD&ART) project in Vitondale, Pennsylvania. The AMD&ART effort worked over the course of twelve years to restore the Blacklick Creek and surrounding land, an area which had become extremely polluted by acid mine drainage, an orange syrupy poisonous discharge of sulfuric acid from the former Vitondale mine that poured out of a mine portal into Blacklick Creek at a rate of two hundred gallons per minute (Reece 2007). The restoration work in this case occurred, basically, in "the town dump," immersing persons in nature's underside, dredging up feelings of loss and lament, even a sense of hopelessness with regards to the post-mining town's future, including the creek and watershed's future.

Yet in the end, as well as throughout the process, the project wound up being extremely successful in many ways. A series of passive treatment ponds and wetlands were created in order to transform the orange syrupy liquid into clear, clean water. The land along the creek was transformed into a public place with soccer fields, a pavilion, a litmus garden with over 1,000 native trees whose leaves variously changed color to reflect the changing color of the water through its treatment process, and public art that witnessed to the town's coal mining history.

In this case, experiences of transformation, renewal, and meaning came not only through "being in *degraded* nature" but also, and perhaps more significantly, through observing and experiencing nature's self-healing capacity, its proclivity for regenerating wild, prolific life; and humanity's capacity for being drawn into and formed by such processes. While encountering the orange syrupy poisonous acid mine drainage as well as the community's mining past might have engendered feelings of lament and sadness at various points in the project, feelings of deep satisfaction, fulfillment, renewal, and hope came as the creek and surrounding land began to heal itself. Trees were planted, wetlands regenerated, passive ponds created, art which celebrated the memory of local miners installed, hope restored.

Additionally, as both Illick's comment and the Vitondale project indicate, feelings of satisfaction, fulfillment, and hope in relation to restoration work come through "working with a small group of people" to heal the land. Despite tensions and challenges that arise within restoration work where multiple stakeholders are involved, a spirit of cooperation and mutual accountability in caring for particular natural places oftentimes forms in the activities of the work itself, when a group of persons is working to clear buckthorn or rake in seed or plant trees or burn grass and so on. In this way, Leopold's dictum—to live with an ecological education is to live alone in a world of wounds—might be translated into: to live with an ecological *restorationist's* education is to *choose to live with a group of people* in a world of wounds in an *attempt to heal them within and without*.

## Conclusion

This essay showed some of the ways in which the practice of ecological restoration has the inherent potential to reconnect persons with nature in a spiritual-moral sense—to create a larger sense of meaning, as well as to form actual spiritual-moral experiences in relation to nature and its collective, restorative care. More will need to be said regarding the ways in which restoration inspired spiritual-moral meaning and experience actually contribute to the formation of moral identity and norms in relation to caring for particular landed places. How do experiences of transformation and meaning, for instance, contribute to the formation of cooperation, mutuality, and reciprocity, norms that restorationists oftentimes say come to characterize restoration work? What about the relationship between the spiritual-moral values that restoration practice can form and those of the larger society in which restoration efforts take place? And are there ways in which the world's religious traditions might helpfully contribute to public discourse regarding restoration practice?

All of these are among the questions that will need to be examined as the spiritual-moral landscape of restoration practice continues to be explored. Yet they are worth exploring. For restoration practice offers a distinctive, transformative possibility for restoring humanity's relationship with nature in both ecological and spiritual-moral ways. As well as serving as a promising contemporary environmental practice, ecological restoration can serve as a burgeoning public spiritual practice.



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