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Management is Messy

"Don't touch that!" I hear a mother scold her son in a stern tone. He'd left the pavement for a closer look at puffball mushrooms. "You have to stay on the trail where it's safe."

"Ugh, this place is nothing but vines. And look at all these bushes. It's so overgrown."

I hear these and similar sentiments as I walk through a park near my home. Their ideas that the park is unkempt or the trail edges unsafe bounce around in my head. I wonder why we're seeing this place through different lenses.



Photo by Doug Harr.

The expectation that things should somehow be neater and tidier likely stems from how we were taught to tend to our yards. The social convention of the perfect lawn — lush grass an inch and a half tall, uniform and free of weeds or pests — is an obsession that began in the 1800s as a way to signify social status and wealth and a mindset that has trickled its way into other spaces like road ditches or field rows and edges. It's a habit that's hard to break despite what we know about how those choices impact both our pollinators and pocketbooks. But there's no parallel here; this park is not a lawn. This is a place where things live.

I pass a standing dead tree whose missing bark makes its silvery skeleton pop against the woodland's green backdrop. Maybe it's unsightly to some. But to the Red-headed Woodpecker (Melanerpes erythrocephalus) it's the perfect place to forage and raise young. She hops along the trunk stashing food for later. Once common throughout lowa, this is one of the oak savanna species in steep decline as we continue to lose the habitat they need. Among other efforts, land managers are trying to combat this by purposely leaving dead limbs and snags where possible.

Perhaps in the cavity above that Red-headed Woodpecker rests a group of Indiana bats (Myotis sodalis). Indiana bats roost together in small colonies in the summer, and because they're a federally endangered species, trees of a certain diameter in their breeding grounds can't be removed until they've left for their wintering grounds. Many land managers are choosing to girdle unwanted trees — cutting a ring into the bark deep enough to kill the tree without felling it — just to maintain the much-needed habitat.



I stop to inventory the "overgrown" bushes. A thicket of wild plum (Prunus americana) cradles the nest of a Brown Thrasher (Toxostoma rufum), who favors tangly spots and thorny shrubs. Would I want to walk through this? No. That's exactly why she chose this spot for her nest. She's safe against attacks from all directions.

Even the vines have a purpose. Virginia creeper (Parthenocissus quinquefolia) is a common vine in lowa woodlands that announces its presence with brilliant red leaves each fall. Sending tendrils every which way, it can climb six or so stories up trees and other structures. Maybe the dangling vines look messy, but Virginia creeper offers shelter and berries beloved by birds and small mammals. It is also the host plant for the caterpillars of several native sphinx moth species. In fact, the park is full of these hidden relationships between plants and animals where one can't survive without the other... including some of our least favorite, "unsafe" plants like poison ivy and stinging nettles. Remember the Red-headed Woodpecker? He eats poison ivy fruits, too.



Red-headed Woodpecker. Photo by Jim Durbin

But what about the "weeds"? Sometimes things just seem weedy when they aren't. In this agriculture-dominated state, we're conditioned to see all thistles as a threat. But lowa has six native species of thistles — misunderstood plants that belong on the landscape and serve vital roles. Flowering in late summer and fall after the blooms of many plants are long gone, they provide food for songbirds and insects when there's not much else available, including the federally endangered rusty patched bumble bee (Bombus affinis). Their fluffy seeds line the nests and fill the bellies of our state bird, the American Goldfinch (Spinus tristis).

Iowa's Native Thistle Brochure >

These "untidy" components of habitat are all maligned; not everything needs intervention. But there are also misconceptions surrounding the times when land managers do intervene. In the case of dealing with invasive species or restoring habitats, oftentimes things look worse before they look better.

Lake restorations come to mind. It's a jarring sight from the second the notch in the dam is cut. The water's sudden departure yields a smelly aftermath. Large equipment removing decades of sediment build-up seems heavy handed. It's often a years-long project that (temporarily) wipes out the aquatic life and prevents us from visiting. But every aspect of a project like this has been calculated by a qualified team of biologists and engineers; the lakebed has to dry out before you can safely do earthwork; vegetation is allowed to grow before refilling to provide improved structure for fish; fish species are added slowly and in proper amounts to produce the healthiest and most complete ecosystem. Each detail is backed by science and training.

Back to the thistles. In the control of any noxious weed or invasive species, timing is critical. Attempt at the wrong time and not only will you not succeed, but you could make things much worse. Problematic species are often left to grow until the moment is right; this might look neglectful to the untrained eye. People making these decisions have education and certifications to not only identify these problems but to choose and use the right tool, be it a chainsaw, chemical, mower or fire. It takes time to make progress. Seeds of some invasive species — like wild parsnip or garlic mustard — can remain viable in the soil upwards of a decade. Land managers come back to tend to the same spots year after year. It's not a one and done process.

Even native species are sometimes targeted when doing habitat restoration. It's easy to understand why this looks destructive at first blush. But a land manager knows the prairie ecosystem she's restoring is more sensitive, more critical and more scarce than the dogwood, willow or cottonwood patch growing in the middle of it. She knows the splintered bits of ironweed or elm left in the wake of a forestry mower were never meant to be a part of that oak savanna ecosystem. Those decisions aren't taken lightly, though. The collateral damage is weighed carefully as the land manager's choices foster a healthier, more complete picture. Back to the way things were before.

Management can be messy, but it's rooted in science.

Sometimes there's an obvious and urgent issue, but the solution might be far outside the scope of any single land manager's abilities. I think about the beaches in many of our parks. In the peak of summer heat, the time of year you'd most want to take a dip to cool off, many lowa beaches are plagued with an abundance of vegetation and the stench (and danger) of blue-green algae. Why isn't someone doing something about this? In most cases, the answer lies outside the park boundary, across the many other parcels of land that make up that lake's watershed. Change must happen there to improve the lake.

How does a land manager decide what to tackle? They'll opt for projects that yield the most benefit for wildlife or plant communities. Those areas might not be in the highly disturbed (but more visible) park edges along roads or trails which tend to have the least amount of natural habitat intact; they will choose to make progress on the interior where the native habitat and plant diversity is more stable. And the "issues" pose different levels of ecological threat — time is spent addressing the most worrisome concerns first. A forest of honeysuckle takes a backseat to a small patch of Sericea lespedeza; their potentials for ecological disaster are not equal. Implementing a targeted approach helps managers more feasibly reach larger ecological goals.

"Our stewardship focuses on the overall health of the natural community, which includes native plant and animal diversity, proper habitat structure and function," explains Brian Fankhauser, INHF Senior Land Stewardship & Blufflands Director. "We prioritize stewardship that perpetuates and enhances these qualities and allows the natural community to thrive."



This park, along with nearly every other, has a management plan detailing what should be done when. Management plans take a wide number of considerations into account — everything from historical perspectives to current issues like ecosystem health and intended use. Decisions balance the needs of the visitors seeking outdoor recreation opportunities with the needs of those who live there day in and day out — the dragonflies, salamanders or fungi. In some situations, maybe in city parks or areas with high traffic volumes, we do need more infrastructure, more mowing, more human involvement. But not every space requires the same upkeep. It's time to shift our mindset, perspectives and expectations when we enter a park, wildlife area or trail.

In fact, maybe the word 'manage' — and the idea that we are in control — is part of why we have these struggles in the first place. Consider the definition from Oxford Languages: "Manage" — To be in charge of (a company, establishment, or undertaking); administer; run.

How well does that jive with the natural world? It's because of this discord that some are moving away from that word.

"I prefer the word 'stewardship'; it's a better descriptor for the work that we do," said Ryan Schmidt, INHF's Central Iowa Land Stewardship Director. "It's almost a sacred word. To me, it means that we're following nature's lead, but we're here to help."

There are a variety of ways INHF stewardship staff help lowa's native and diverse habitats thrive. Each project — on private, public or INHF-owned land — is uniquely stewarded. No matter if it's brush removal, invasive species control, prairie plantings, prescribed fire or other land management practices, the wellbeing of natural resources is always at the forefront. We make choices, watch for the land's response and adjust accordingly.

"We take the time to listen to what the land needs, where it needs some help," Schmidt said.

But let's take it a step farther: imagine that a piece of land doesn't have a caretaker at all. Left entirely to its own devices, the prairie fills in with trees, the woodland fills in with invasive plants, the habitat is degraded. It's not suitable for hiking or

hunting, paddling or biking. Is it still worth something? Independent of our intervention, that land is still offering refuge, sequestering carbon and storing and filtering water. Services to the earth and its inhabitants, including us. The tangliest, most overgrown place you can picture still matters. It's still worth having.

For Mike DeCook, INHF Board
Member since 2004, these wild places
hold tremendous value. He's spent a
great deal of effort "rewilding" places in
southern lowa, focusing on creating
spaces where nature can have refuge
from us and going so far as to
"undevelop" them by removing human
elements like roads or fences.
"This is wild nature on nature's terms,"



DeCook explained. "Wild nature has intrinsic value regardless of its economic benefit or worth to us."

Following nature's lead. No, this park — and any other wild space — is not a lawn. It's a place where things live. Here, we are rectifying harm where we've caused it and restoring balance where we've thrown it off. I continue my walk, trusting nature and trusting those who steward it.

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