

A Cure for Meadow-Lust

Forty years ago, when my wife Kathryn acquired ten-acres of abandoned pasture on a rocky island off the Maine coast, it was blanketed with sample-sized red and white spruce, two species quick to invade disturbed areas. Through the years, this spruce monoculture has kept deciduous trees at bay. Now, our only broad-leafed species are a few spindly white birches and an occasional poplar, red oak, or sugar maple. Worst of all, the spruce trees tower over us and block the sunlight. We grow good lettuce and greens, but our tomatoes and peppers thrive only in the brightest spots and we've never had a crop of apples or plums.

One spring morning, Kathryn banged her coffee mug down on the deck and motioned toward the wall of evergreens. "If we're ever going to see the sun rise," she said, "we'll have to get rid of these spruce." Her voice dropped an octave and she squeezed my shoulder. "We should open up this land and create a meadow. Let it revert to asters and sunflowers, butterfly weed, black-eyed susans, echinacea..."

Her words reminded me of how much we envied our neighbor's meadow less than a mile away. What a brilliant idea. Why spend most of the day in the shade, hemmed in by evergreens? All I had to do was fell a few spruce. Should be easy enough.

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After lunch, we drove into town and I purchased a chainsaw, two gasoline containers, and a six-pack of two-cycle oil. And, a modern-day lumberjack outfit: protective chaps, heavy duty gloves, helmet with ear muffs, and goggles. Once suited up, I was glad that none of my friends could see me. I looked more like a bomb disposal expert than a homeowner consumed by meadow-lust. Before I took to the woods, Kathryn photographed me and threatened to send the picture to a beefcake magazine that featured robust young men in athletic poses.

Buzzing through trees with a chainsaw was easy; getting them down was not. About half never fell and became trapped in the branches of another. I had imagined setting up brush piles some distance from the house, but toting branches and sections of truck even a short distance was a chore. I began to realize this project was more than a seventy-year-old man could accomplish.

Several days later we were having a glass of wine on the deck when the subject of tree-cutting came up. "How's it going?" my wife asked, glancing at a brush pile next to the house, the only sign that progress was being made. Neither of us favored burning, but must that pile be so close? I advised her that our cat, Smokey, liked it and had spent the afternoon sniffing around the base looking for mice. Instead of answering, she told me that our neighbor, who owns twenty acres adjacent to ours, was about to clear out most of her spruce. She wanted to open the land for wildflowers, mammals, and birds of prey. She had hired a forester to plan the project and would get loggers to do the work. The cost of tree cutting would be defrayed by selling the timber. She might even make a little money.

With visions of meadows dancing in my head, I was about to contact her forester, then stopped. A queasy wave washed over me. Taking out the spruce right around the house was one thing, but hire loggers? Would that mean clearing out everything? Kathryn and I wanted to grow better fruits and vegetables, see more hardwoods and wildflowers. Like my neighbor, I hankered for open space, but would this be too much?

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The desire to alter nature runs deep. Native Americans set fires to clear forests, early colonists built dams and harbors, dredged waterways. These days, many biologists push developers to establish islands along empty coastlines and drop artificial riffles into streams where there are none. They want to free whales trapped in ice, set out hay for deer in winter, vaccinate diseased wolf packs, hire hunters to reduce overabundant deer populations. Some of these modern-day projects are in response to human encroachment. Others are initiated for less obvious reasons and can be met with opposition. What is reasonable interference and what is not?

From a biological standpoint, a meadow is a moist old field poised to become a woodland. Once cleared, native evergreens and brambles pop up and overtake slower growing deciduous trees. To maintain a meadow, one must tame natural succession: the gradual march through time of different plant species on a landscape. Otherwise the meadow will revert to brambles and sumac, then ultimately spruce. Many parcels of land on this island, with their nutrient-poor, rocky soil, may never support broad-leafed species.

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Cautious but still interested, I contacted our neighbor's forester. He appeared a few weeks later, wearing a clean, well-pressed khaki outfit with pant legs stuffed into his socks to ward off ticks. He was glad we were interested since it could be cheaper and quicker to use

the same logger for both properties. He wanted to tour our woodlot. My wife and I donned boots and long-sleeved shirts and trudged after him.

Although this was his first time on our land, he outlined a tree-removal strategy without hesitation. "We should keep this one and that one but harvest those," he said, stopping several times to caress the bark of a healthy red spruce. A triage system for trees: high quality reds would be cut and sold, windfalls and brush would be gathered into piles for wildlife. The good stuff: maples, oaks, beech, and white birch, plus a few healthy spruce saplings, wouldn't be touched. Our forester had converted my vague desire to cut a few trees into a woodland management plan.

The three of us paused in a wet area, thick with skunk cabbage, interspersed with hardwoods. "We'll leave this spot alone." As he spoke, shiny black muck oozed up around our boots.

And, he explained, the entire ten acres wouldn't be worked. About half the land was either too wet, or the trees were of very low quality and not marketable. This would not be a clear-cut, but a selective harvest aimed at specific areas. To get my meadow I would have to scrape the brush into piles and mow every so often. Otherwise, the unmanaged cut areas would revert to spruce. We were impressed by this approach.

Reducing the number of spruce will increase biodiversity, a laudable goal. A meadow is more diverse than an evergreen thicket. But I wondered, does this really make my land *better*? Is an acre of tropical rainforest with high species richness more valuable than a wedge of species-poor arctic tundra?

We stopped by a tumbled down, moss-covered stone wall, partially hidden by dead branches and spruce saplings. It runs half way around our property and was built when the land was cleared over a hundred years ago. Back then it served as a depository for fetched rock and as a rudimentary fence. We loved this old wall and would clear off the brush so we could see more of it.

With equipment and prowess, we can restore a landscape to an earlier time. Does this mean we return to when pastures were overburdened with cattle and pocked by empty rum bottles and bean cans? Should we reset to when most of the northeast was stripped of timber, or when the area was managed by Native Americans? Which *was* do we want?

Such questions are difficult to answer. Perhaps they shouldn't be asked. Nature makes no judgements on value. No rule book states what or how to manage, what to leave alone.

Our forester suggested we inspect a couple of nearby logged areas in the early stages of regrowth. On the first, most spruce had been removed a year earlier. Hardwoods and healthy pines hadn't

been touched. The floor was littered with cut branches, a scattering of one to two-foot tall stumps, a few bracken ferns, but not much else. The second, more aggressively harvested two and a half years before, showed signs of regrowth. A narrow strip along the river was blanketed with goldenrod, brown-eyed susans, sumacs, spruce saplings, and a snarl of blackberry and raspberry bushes. Excellent habitat for raccoons, rabbits, field mice, box turtles, and garter snakes. I could imagine jays and crows flitting about, a solitary red-tailed hawk gliding overhead.

As we walked, Kathryn and I thought of other reasons to clear out spruce. The old ones near the house could topple over and crush the roof or block the driveway. Fire is always a concern. As the climate warms and weather becomes more erratic, we should create fire-breaks, not store fuel.

No doubt about it, portions of our land should be cleared. All we had to do was choose a logger.

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Four of us sat at the table: the forester, our neighbor, Kathryn, and me. We had bids from three loggers. Two were from large forestry management services whose completed projects we had visited. The third was from an independent operator who lived on the mainland. The decision on which logger to hire hinged on four points: when the work would be done, methods and equipment to be used, which process would cause the least environmental damage, and the dollar value of the harvested timber. In this case, the highest bidder would give us the most money for the timber that he sold. For efficiency, both of us should use the same logger and follow identical plans.

The two large corporations used a cut-to-length harvester, which is a modified excavator that can cut, delimb, and section a tree in less than a minute. A second machine, known as a forwarder, picks up the logs and carries them along a temporary road to a staging area. The local logger would do all the cutting with a chainsaw. After he felled, delimbed, and sectioned the trunks, he would use a skidder, often operated by his wife, to gather up and drag logs to a staging area.

Our neighbor wanted the highest bidder, one of the two forestry management services. She worried that dragging logs through the woods would knock bark off live trees and scuff up the soil. She wanted to deal with a "big outfit," then added, "I don't believe one man can do this all by himself." Had she forgotten that the man's wife could operate the skidder?

I thought hand-cutting would cause less overall damage than the mechanized harvester. The sawyer could work right next to our house, which was important to us. Dragging logs might knock some bark off trees and scuff up the ground, but the soil would recover, and

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besides, a shallow surface stir could kick-start herb germination. The local logger wouldn't need a temporary road and could begin as soon as the ground was frozen, perhaps in December. The others might not start until summer when soil damage would be greater. The local operator offered us the lowest price for the saleable timber, but so what?

My neighbor listened to all this, then said, "I don't care about all that, I want the highest bidder."

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I decided that we should meet the man who did all the cutting by hand. A few days later, Toby Woodward stopped by. He was tall, young, and jovial, wore blue jeans and a dark flannel shirt. As we stepped over logs and pushed through brush, I asked a bevy of questions: "Can you take out trees that lean toward the house? Can you pull stumps, scrape branches and tree tops into piles for wildlife? Will you leave the hardwoods and healthy spruce? Can we preserve the standing dead trees for woodpeckers?"

Yes, yes, and yes. He could do all of that. The decision was made. We would hire the independent logger.

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Over a glass of wine that evening Kathryn and I pondered the circuitous route that led to Toby Woodward and his chainsaw. It started with our wish to see more sun, then expanded to our desire to reduce the risk of fire, eliminate damage from falling trees, increase biodiversity, and, most important, minimize environmental disturbance.

Our management plan won't require huge equipment or temporary roads. When finished, about half of our ten acres will be cleared. A portion will revert to spruce. Every so often, I'll mow the cleared areas. In a few summers, Kathryn and I will have that meadow. We'll be able to wander among asters and black-eyed susans, clovers and sunflowers, watch hawks glide overhead, listen to meadowlarks and killdeer as they search for insects and seeds.

And watch the sun rise and the sun set.