Alternative Meadow Making....the (Modified) Wait-and-See Approach

By Bonnie Beers November 2020

We wanted to create a low-growth meadow in a 3 acre area near our house. Ever hopeful and loath to use chemical sprays, we decided to give this former hayfield a chance to show its stuff. The site had been mowed for hay with little improvements for decades, at least. It was bordered on one side by a small stream and woods border, on a 2nd side by a deeper woods, and on the remaining sides by our driveway and the mowed/planted areas around our house. Along the woods edges, we found natives like sumac, dogwood, redbud, locust, pine and cedar, and hardwoods. We also found a patch of ailanthus, a good bit of autumn olive and some encroaching vines like Japanese honeysuckle and oriental bittersweet.

What next?

Being novices, we asked for help.

- We scheduled a site visit with the forester assigned to our area, through the Virginia Department of Forestry.
- After talking with our forester, we requested a Land Stewardship Plan, which provides a detailed analysis of soils, type and densities of plant growth, land history based on "forest forensics," and a schedule of actions to consider that were based on our stated goals for our property.
- We met with our forester to discuss how best to gain financial assistance for our effort to convert
 the hayfields to forest and create a low-growth meadow. We decided to seek grant support for a
 tree-planting project through Natural Resources Conservation Service (NRCS). Because of timing
 and our desire to adopt a minimalist approach, we did not apply for grant money to develop the
 meadow area.

Then what?

Being novices, we asked for more help!

Even though we were not applying for a meadow grant, NRCS sent a representative to look at our meadow and think with us about what was there and how we might proceed. We had:

- Some fescue
- Some native warm-season grasses
- Many native forbs (flowering plants)

We decided that we did not want to kill off a lot of existing plants that we wanted in order to reseed with many of the same plants. We would:

- Conduct a controlled burn in early spring to create soil and light 'space' for the seed bed to show itself. We engaged the Virginia Department of Forestry to manage the burn (fee: \$25/acre).
- Remove invasive non-native growth, primarily ailanthus and autumn olive—via "cut-stump" method
- Catalog what we observed

Results:

<u>Year 1</u>: results from not-too-rigorous observations

- Much increased edge growth of dogwood and redbud
- Warm season grasses: little blue stem, beak panic grass, purple top, broom sedge, purple love grass, blue-eyed grass, deer tongue, native foxtail, autumn bentgrass
- Forbs: daisy fleabane, alium, horse nettle, red clover, milkweeds (syriaca, tuberosa), native thistle, narrow-leaf mountain mint, pasture rose, bush clover, rudbeckia, lespedeza, desmodium,

wingstem, pilewort, dogbane, leafy elephant foot, wild carrot, fall phlox, pussy toes, venus looking glass, lyre leaf sage, tall blue lettuce, rough fruited cinquefoil, achillea, northern nodding ladies tresses, NY iron weed, goldenrods, showy tick trefoil, Indian tobacco, false nettle, assorted asters, wild basils

Year 2:

During Year 2, we left the growth from Year 1 standing. No mowing, no burn. The result was a more fescue-dominated growth. Untreated, the fescue took over more area and choked out some native forbs observed in Year 1. Fewer warm season grasses, fewer native forbs.

Now what?

We have decided that if we want to give the native grasses and forbs a fighting chance, we have to control the fescue. This fall, after a couple of hard freezes have rendered warm season native growth dormant, we will spray the cool season grasses. In early spring we will conduct another controlled burn. This round, we plan to design a more systematic observation and record-keeping protocol.

Based on observations of other areas, we are still hopeful that the existing seedbed can restore a native low-growth area. In late fall, 2019, we bush-hogged the back-side of our dam to control woody growth that might potentially weaken the dam. A side effect of this effort was a beautiful, season-long array of native wild flowers and grasses. Our interest and pleasure is observing and thinking about how to be stewards of existing native growth--in hopes of inviting more wildlife, flora and fauna, to this bit of land.

The experiment continues.