

Natural Resources Management Report

DeKalb County Forest Preserve District

December 2016

Primary activities during the month of December included:

1. Completion of 2016 seed processing and inventory. The final batches of seed that were collected this year were processed (dried, then stems, capsules and dust removed) and inventoried this month. Our stewards, staff and other volunteers collected over 210 pounds of seed comprised of 152 species of native prairie, wetland, and woodland plants. This would be well over \$25,000 dollars if purchased from a commercial seed dealer! Many thanks to our stewards who collected the bulk of this seed. Each Wednesday morning, five to ten stewards join us for a few hours of ecological restoration and education. In the autumn, this is mostly seed collection.

2. Frost seeding. Just like Mother Nature, we plant our seed in the fall and into the winter. Some is mixed with purchased seed to establish new plantings, and some is used to over-seed in established plantings where we want to enhance diversity or density. Except for grasses, nearly all native perennial seed needs of period of moist cold stratification, which happens naturally if the seed is scattered in the fall or winter. The snow, rain and freeze/thaw cycles work the seed into the soil and trigger the biochemical processes that allow the seed to germinate in the spring. If the seed is stored in a dry place for the winter and planted in the spring, much of it would not germinate until the *following* spring. In December, we “frost seeded” about 2 ½ acres (35 pounds) of emergent wetland seed in the mud flats where we lowered the water levels in Phase 1 and 2 of the Afton Wetland Bank.

3. Tree and brush removal. Winter is the best time for the removal of woody invasive species. The best conditions are when we have frozen soil with little or no snow. We use two primary methods: a BobCat mounted rotary mower, called a “BrushCat” which works like a super heavy-duty lawn mower, grinding down brush and small trees up to three or four inches in diameter. This works best in more open areas. Where larger trees are intermingled, we use chain saws and hand held motorized brush cutters. This December, most of our tree and brush work has focused on the overgrown former nursery area at the Afton Preserve. Our stewards help us drag the brush and branches in to piles and then burn them up.

4. Management schedule reviews. Our planning and scheduling for 2017 Natural Resource Management activities wraps up in December. Terry Hannan, Al Roloff and Josh Clark meet to review and tweak the management schedules that Al prepares for each preserve. These management schedules outline the primary objectives, activities, timelines and personnel required to meet the ecological restoration goals for various units in each preserve. These schedules guide us through each year’s restoration work.

5. Coordination of wetland mitigation bank repairs and improvements. We met for a second time to discuss features with the engineer who is designing the replacement weir structures for two of the wetland impoundments at Afton. Both new weirs will include components for reducing water levels when needed, and provide for vehicle access across the top. We also met with the excavator who will be armoring the wetland berms with rip-rap this winter, as conditions allow. Our staff will assist with staging the stone in sites where the dump trucks cannot maneuver.



Stewards warm up next to a burning brush pile in the old Afton nursery site.



What's this? A "Threeridge" mussel from the Kishwaukee river, one of the more common species. Our stewards will help us continue our monitoring of these fascinating creatures during summer, 2017.