

Circle Sanctuary

Nature Preserve Committee Recommendations





LAND MANAGEMENT GOALS




Goal 1: Maximize Species Diversity

Promote correct species for the native ecology

- **Oak Woodland Preservation**
 - Oak Woodland is a definitive ecological feature of this region, and is spiritually significant as well.
- **Prairie Restoration**
 - Ongoing prairie projects have increased species diversity
 - Includes restoration of Oak Savanna areas where appropriate
- **Stream and Wetland Preservation**
 - Circle is blessed with an abundance of good surface water, which can be made even better
- **Border Region Management**
 - Enhancing habitat for greater species diversity




Goal 2: Build Community Engagement Education, Volunteerism, Accessibility

- Increase accessibility by creating & maintaining trails into more of the land, and providing better maps.
 - Advocate more conservation programming at Circle events
 - Improve credibility within conservationist community by getting invasive species under control
 - Offer more and better-targeted volunteer opportunities
 - Engage in outreach to not only Pagans but to other conservationist communities
 - Improve publicly-targeted education efforts by developing more accessible reading material / maps / photos of the land
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Goal 3: Improve Organizational Use

Trails, Drainage, Camping, Shrines

- Expand and improve the uphill woods camping areas
 - Maintain and improve trail access to shrines and other features
 - Repair and re-establish drainage in certain areas
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Goal 4: Tend the Spirit of the Land

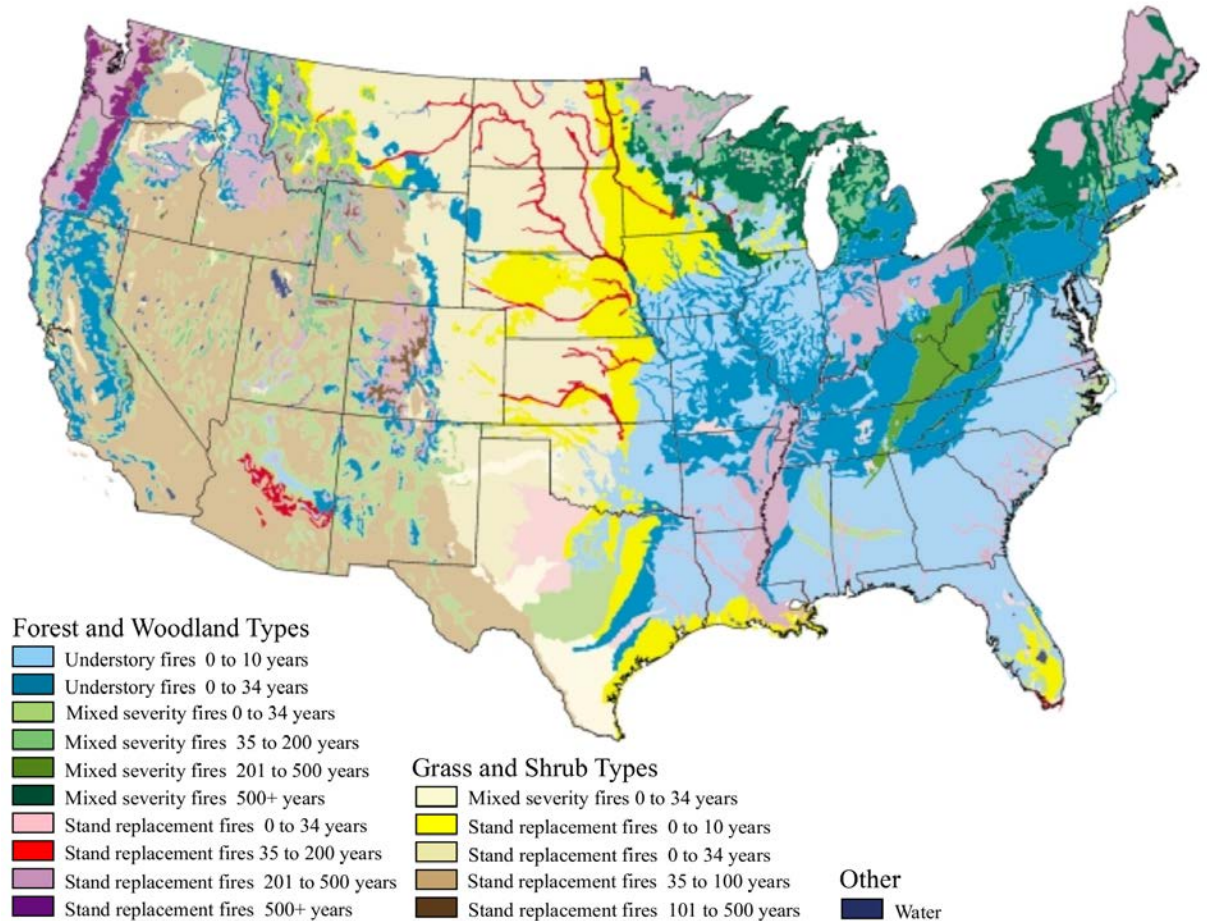
- Pay heed to existing Community uses
 - In considering methods, balance efficacy, precision and safety. Do not hesitate to address illness/imbalance on the land, but use the least harmful means possible to do so.
 - Foster the mindset that conservation work is a rewarding avenue of spiritual service
 - Preserve existing features of spiritual significance, and improve accessibility to features that are hard to get to today
 - Find those Community members who've had those deep experiences on the Land, and draw on their energy and enthusiasm.
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CONSTRAINTS


Circle Land quality is declining

- This Land, under natural conditions, should burn at least every 10 years.
- Fire suppression has upset the Land's natural balance.






Circle Land quality is declining (cont'd)

- This decline is a century in the making, and is faced by all of Circle's neighbors too.
 - It started with fire suppression and the introduction of pasture grasses. Some farmers in WI continued to burn oak savannahs into the 1950s, which was helpful.
 - It accelerated with the spread of non-native invasive species, many of which are relatively new to Wisconsin.
 - The Prairie Restoration movement only goes back to the mid-60s, and research on other types of restoration is ongoing.
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Conservation is hard work and rarely gets all the budget & manpower it needs.

- Our local pool of volunteers is small. Our able-bodied local pool is smaller. Our able-bodied local pool who is interested in conservation is smaller yet.
 - Wisconsin's climate limits the number of working days, and Circle's organizational calendar limits them further still.
 - We do not have enough volunteers to fully and properly maintain the land.
 - Circle does not have the budget to pay for the full range of equipment which could multiply volunteers' efforts.
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Failure to maintain the land has a negative social impact on the Circle community.

- The harder it is to get out and enjoy the land, the harder it is for community members to have the deep connective moments which inspire them to return year after year.
 - Conservation-minded members of the Circle community have experienced -- and expressed -- frustration over the years at the perception of unchecked decline, and at the historical roadblocks posed to modern conservation techniques.
 - Outreach to other conservationist communities is negatively impacted as well.
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CHALLENGES



Invasive Non-Native Species

Highly competitive, degrading native ecology.

- Species of concern on Circle Land right now:
 - Buckthorn
 - Honeysuckle
 - Multiflora Rose
 - Autumn Olive
 - Garlic Mustard
 - Canada Thistle
 - Sweetclover
 - Wild Parsnip
 - Japanese Hedge Parsley
 - Reed Canary Grass
- Substantial remediation work needs to start **NOW**, and long-term ongoing control is needed.



Uncontrolled weedy native species

- Some of the species of concern:
 - Box Elder
 - Aspen
 - Willow
 - Prickly Ash
 - Ground nut
 - Wild Grape
 - Goldenrod
- These are normally kept in check by fire. In the absence of fire, they've gotten out of balance and are threats to some of our goals.



Threats to preferred species/habitats

- A few examples:
 - Maple on the lower approach to Spirit Rock is threatening a section of oak woodland, as well as shading out proper and healthy understory
 - Uncontrolled shady growth (honeysuckle, willow) over portions of the Stream leads to unstable banks and poor species diversity – “a dirt pipe”.
 - Aspen clone at the edge of the Restored Prairie continually attempts to spread into the prairie.
 - Thick hedges of honeysuckle and multiflora rose (among others) make for poor habitat and species diversity especially in border areas, where woodland meets open field.
 - Garlic mustard chokes out healthy, diverse and beautiful woodland understory.



Threats to community functional areas

- Examples:
 - Uncontrolled dense growth of multiflora rose, buckthorn and other prickly plants deny access to a substantial part of the land and the shrines, springs and other features on them.
 - In conjunction with the above, actively noxious plants like wild parsnip make for hazardous going for the unaware – even in commonly traveled areas like Meadowvale and Brigid Spring.
 - Overgrown trees on thin, sandy soil above the Shrine Walk trail now come down with some regularity onto the trail.



RECOMMENDATIONS

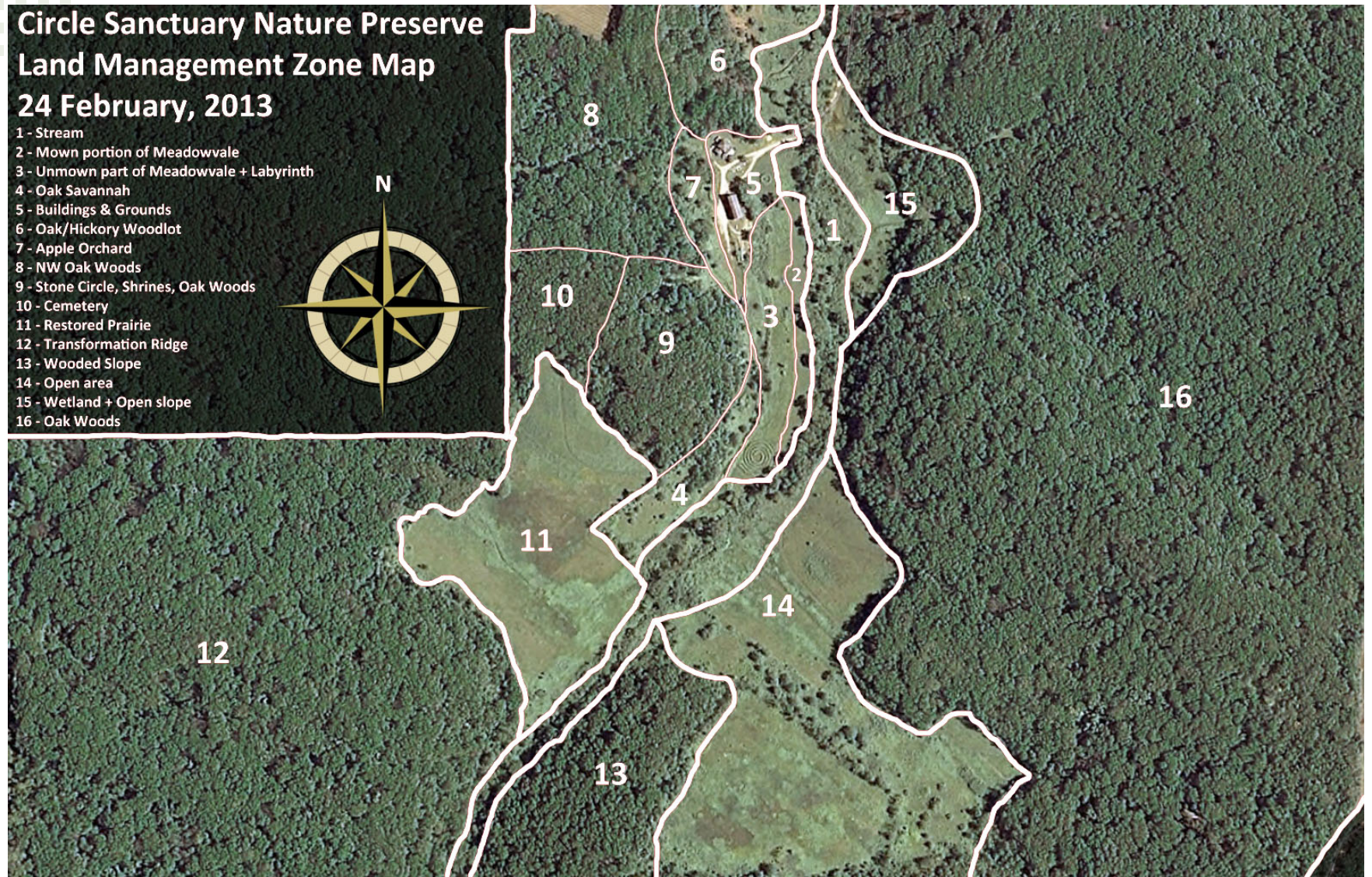
- In this first phase, where we have a substantial problem with invasive species and have not yet built a sizeable volunteer corps, we must adopt a balanced approach incorporating all economically-feasible mitigation methods.
- As we make headway against non-native invasive species, **Prescribed Fire** will become the preferred approach for ongoing maintenance.



THE MAP


Circle Sanctuary Nature Preserve Land Management Zone Map 24 February, 2013

- 1 - Stream
- 2 - Mown portion of Meadowvale
- 3 - Unmown part of Meadowvale + Labyrinth
- 4 - Oak Savannah
- 5 - Buildings & Grounds
- 6 - Oak/Hickory Woodlot
- 7 - Apple Orchard
- 8 - NW Oak Woods
- 9 - Stone Circle, Shrines, Oak Woods
- 10 - Cemetery
- 11 - Restored Prairie
- 12 - Transformation Ridge
- 13 - Wooded Slope
- 14 - Open area
- 15 - Wetland + Open slope
- 16 - Oak Woods





About the Map

- Starting with the most current aerial photo available, the land was divided into 16 Management Zones with roughly similar geography and community purposes.
 - This will be refined and subdivided over time, as we resolve the issues peculiar to the centrally-located zones and turn our efforts toward the more remote areas.
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PRIORITY PROJECTS

Buckthorn Remediation

Zone 16, near Spirit Rock & Wildcat Ridge

- **Oak Woodland**
Preservation priority, as buckthorn is crowding & killing old oaks now.



Maples in Zone 16

Lower approach to Spirit Rock

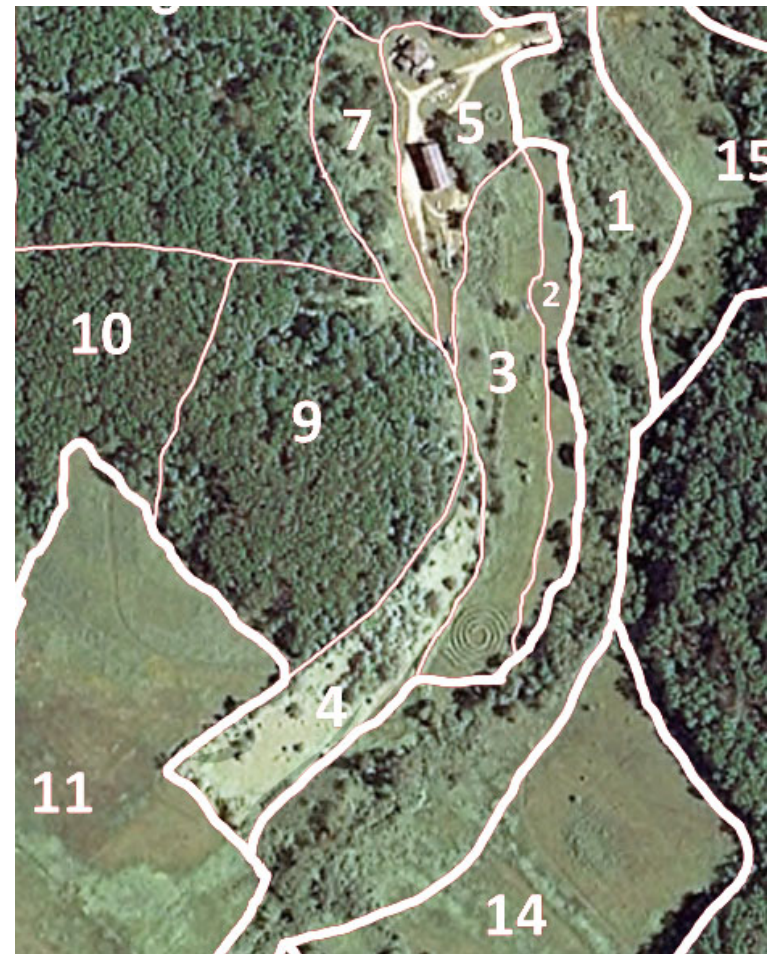
- **Oak Woodland** Preservation priority.
- Since maples shade so effectively, the outcome is an understory of garlic mustard, buckthorn and box elder.



Oak Savanna Restoration

Entirety of Zone 4

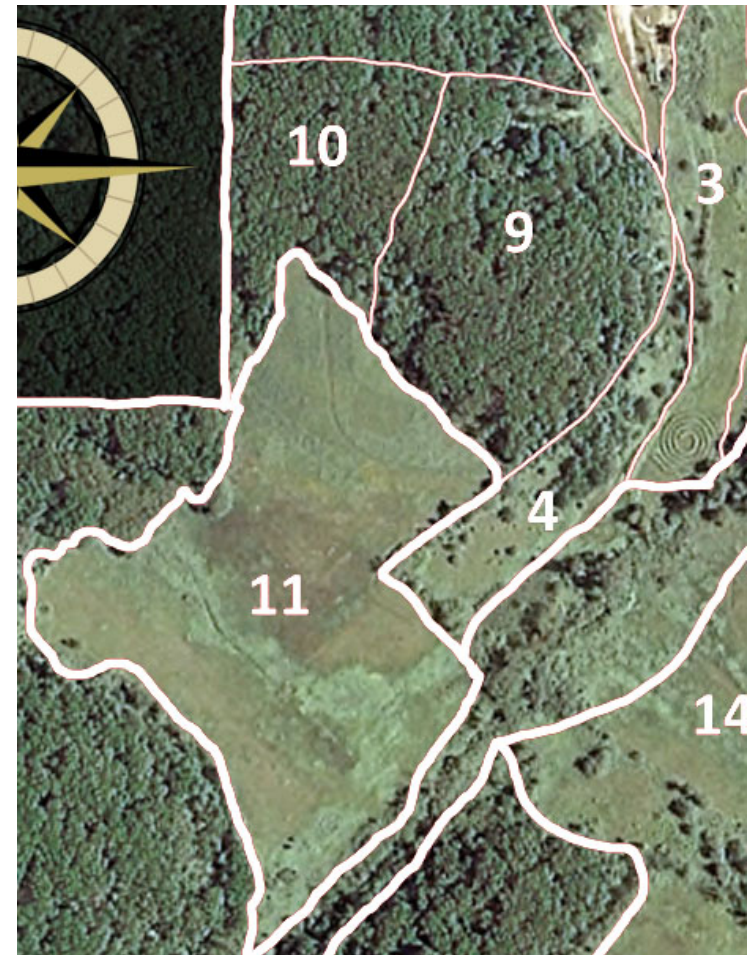
- This ought to be prairie grasses & forbs with scattered oaks, hosting unique species that aren't perfectly adapted to either woods or prairie. Instead, it's pasture grasses, honeysuckle, multiflora, wild parsnip and Japanese hedge parsley.
- If restored, this would become prime bird habitat.
- Highly visible area, and cleaning this up will improve the view of the Labyrinth.
- Method: mechanical brush cutting starting now, then a burn in early April. Oak savannas are classic fire ecologies, and only fire will fix this.



Restored Prairie Expansion

Entirety of Zone 11

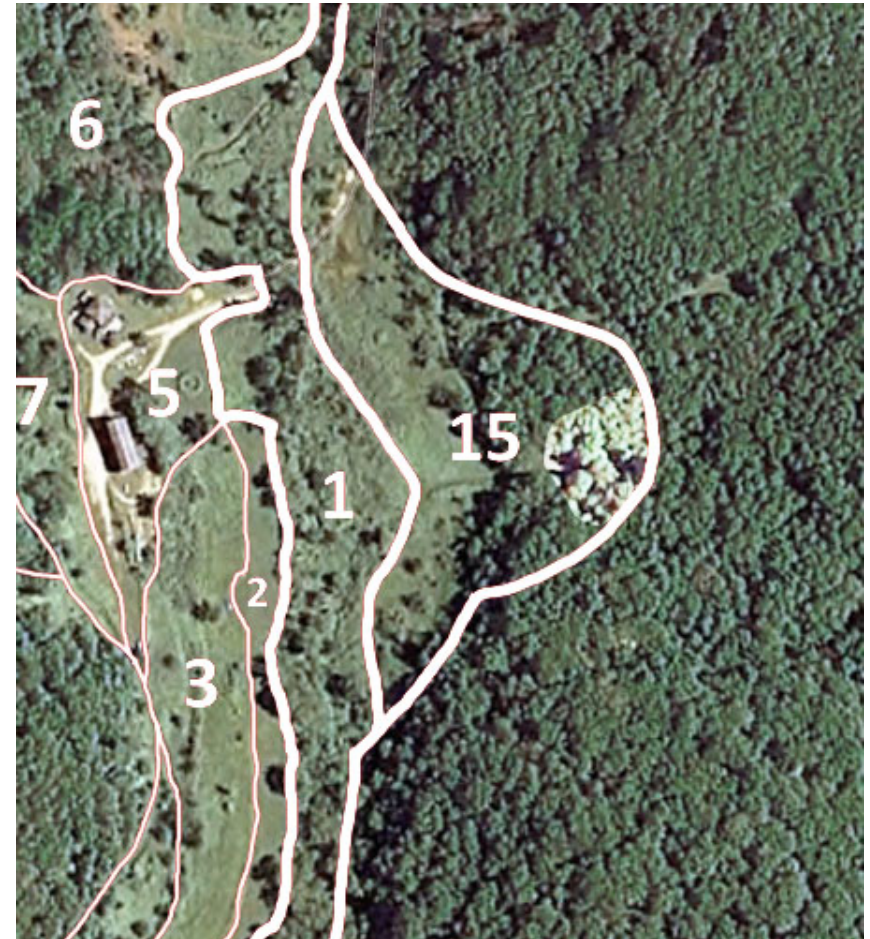
- A **Prairie Restoration** project. We've burned the northern portion for years, and first burned much of it 2 years ago.
- Safely done, it requires a largish crew and a mown firebreak around the whole zone.



Garlic Mustard

Behind and around Fire Circle in Zone 15

- **Oak Woodland Preservation** – garlic mustard chokes out the proper understory, and nothing eats it. Considered a “population sink” for some butterfly species.
- Also a **Community Engagement** goal for the Fire Circle tribe.
- First, the brush must be mechanically removed to grant access to the garlic mustard.
- Requires several consecutive years of work, and eventually prescribed burns for maintenance.



Multiflora Rose / Brush Clearing

Zone 7

- This could become prime shaded camping space.
- Probably the single most visible area we work on.
- Clearing and maintaining access to apple trees a secondary goal.
- Could be better habitat if the choking brush were cleared out.



Reed Canary Grass

Zone 14

- **Stream and Wetland Preservation** goal. Aggressively creates monocultures, and would transform the wetland into a bog if it got in there.
- Also a **Prairie Restoration** goal.
- Remediation is easy now, but would be very difficult if seeds were tracked into the wetland.



Willow/Brush cleanup & drainage work

Northern quarter of Zone 3

- Willow growing in the drainage ditches is impairing proper drainage throughout Meadowvale.
- Honeysuckle and willow brush is poor habitat also.
- Area could eventually undergo full prairie restoration, as it's currently a mess of pasture grass + goldenrod.
- Method: Remove all the willow in the drainage ditch, and dig out the ditch. Also, remove all the brush extending south.



Stream Bank stabilization

Zone 1, along the length of Meadowvale

- A **Stream and Wetland Preservation** goal: we have a healthy stream north of Brigid Spring, and have made good strides toward opening it up. We should do the same south of the Spring, where heavy honeysuckle growth has shaded everything else out.
- Getting some sunlight into there and grasses on the bank will stabilize it, slow the flow, and increase populations of fish, dragonflies, other insects and a range of birds.
- To maximize diversity, partial shading is best.
- Method: Mechanical removal of some (but not all) of the brush, followed by planting of ground cover species such as Virginia rye.



Oak and Hickory Woodlot Management

Zone 6

- This is an **Oak Forest Preservation** goal: this area has some of the oldest oaks on the land as well as a mature hickory population.
- Presently cluttered with multiflora, buckthorn, honeysuckle and Japanese hedge parsley.
- If cleared, would support a proper woodland sedge population and be good camping space.
- Also, acorns and hickory nuts could be gathered here.





Priorities


- Clear invasives and burn Zone 4
- Burn Zone 11
- Buckthorn treatment in Zone 16
- Maple treatment in Zone 16
- Drainage improvements in Zone 3
- Brush clearing in Units 7 and 6
- Spot treatment of wild parsnip in early spring

Beyond that, timelines depend on availability of resources.
Recruitment becomes a key priority.





LONGER-TERM GOALS

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- Comprehensive survey of Circle property
 - Establish and maintain a firebreak/nature trail network throughout **ALL** zones of the property
 - Much of the Circle community has no idea just how much land there is, because they can't get to it and we don't have maps to give them.
 - A huge potential educational resource, that could be made available to other conservation-minded groups.
 - Firebreaks will be needed anyway, as we migrate into doing understory burns in forested areas.
 - Develop a funding base for ongoing conservation work
 - Explore grants to pay for this sort of work, thus learning as an institution how to source and manage paid conservation labor.
 - Explore selective logging of small sections annually, with proceeds to fund ongoing efforts.



GOALS cont'd

- Develop a stronger volunteer base for conservation work
 - Our own trained & equipped Prescribed Fire team
 - Labor for trail & brush clearing
- Capital investment in power equipment (and maintenance regimens for the same) appropriate to the task.
- Identify and open paths to natural glens and openings, and encourage Community members to do spiritual work there.
- Explore land management strategies to reduce property taxes
 - Managed Forest Law is one such option
- Further develop Oak Woodlands, Prairies and Oak Savannahs by clearing invasive species and starting periodic Prescribed Burn regimes.