FINAL REPORT

2017 Indian Meadows (Tsi ienhontakwáhtha) Flora Surveys Lower Grasse River, Massena, New York



Prepared for:

New York Power Authority (NYPA)

St. Lawrence River Research and Education Fund (SLRREF) Board



February 2018

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Suggested Citation:

Johnson, A., S. Bucktooth, J.L. Jock, and J.H. Wilkins. 2018. 2017 Indian meadows (Tsi ienhontakwáhtha) flora surveys, lower Grasse River, Massena, New York. Prepared for New York Power Authority (NYPA) St. Lawrence River Research and Education Fund (SLRREF) Board. February 2018. 112 pp.

Disclaimer:

This document was produced as a tool to assist Federal, State, and Tribal Resource Agency staff on species present and current known Mohawk cultural use of species for designing Superfund Habitat Reconstruction Plans, and/or restorative actions in the lower Grasse River. Its findings are limited to known plant medicinal and food uses by SRMT staff involved and may not be comprehensive of other community elder's knowledge and/or historic uses of some plants, or other historic or cultural plant uses (i.e. functional, ornamental, ceremonial, etc.). This document should not be used for habitat design decisions independent of further consultation and inclusion of Mohawk people with plant Traditional Ecological Knowledge (TEK).

Acknowledgements:

This effort was made possible by funding in the amount of \$13,600 from the St. Lawrence River Research and Education Fund (SLRREF) in 2017 for the expenses of a contracted local Botanist. Matching funds were provided by the Saint Regis Mohawk Tribe (SRMT) to cover overhead expenses and staff support from the SRMT Akwesasne Cultural Restoration Program (ACRP).

SLRREF funding decisions are made by a Board consisting of representatives of the New York Power Authority (NYPA), U.S. Fish and Wildlife Service (USFWS), New York State Department of Environmental Conservation (NYSDEC), Saint Regis Mohawk Tribe (SRMT), and other entities.

Niawen:kowa (thank you very much) to Barbara (Katénies) Tarbell, ACRP Manager for cultivating this working relationship to help bridge the gap of knowledge between scientists, resource managers, and traditional teachings and knowledge holders specific to plants by allowing her staff to participate in the project. Sharing of knowledge of the relationships between people and plants and plant uses was contributed by Alicia (Konwahonwíhshon) Cook, Ernest (Kahentakeron) David, Allen (Shonó:rise) Smoke, Angela (Tsioneráhtase) Barnes, Sa'teiokwen Bucktooth, and Takatsi'tsiónkie Cook. They collectively serve to help preserve cultural use and traditions in Akwesasne and contribute to the revitalization of plant medicine knowledge, traditional practices, and harvest from clean land and water resources.

This field survey project was a collaborative and co-coordinated effort with NYSDEC for access and survey of the detached New York State Forest Preserve (NYSFP) parcels along the lower Grasse River, also known as "Indian Meadows". Without the cooperative working relationship with David Witt, Robert Messenger, Robert Morrell, David Tromp, Joshua Haugh, Peter Frank, and Rosa Mendez this project would not have been possible in an expedited time. Support for the project was provided by Chris Fidler and Don Zelazny related to cultural use benefits to the St. Lawrence River Area of Concern (AOC).

This project is a prime example of how collaborations can make meaningful contributions to the knowledge and revitalization of Mohawk cultural use areas all while gathering data to restore, enhance, and improve cross-agency understanding of the shared resources.

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Abstract

The lower Grasse River was affected by industrial dredging, construction, and effluvia from the early 1900's to the 1950's. Studies undertaken to assess the damage and to describe and document habitat conditions have concentrated heavily on the evaluation of current habitat condition within the riverine system with little attention given to past cultural and historical uses. The lower Grasse River is historically an area of importance to the Mohawks of Akwesasne as reserved in the 1796 treaty (Hough 1853) and as such has been an integral part of their past. The influx of pollutants in the 1950's contributed to the curtailed traditional use of this area and its resources by the Mohawks.

A memorandum from the Environmental Protection Agency (USEPA 2017) addresses the role tribal treaty rights play in the evaluation and restoration process and states that traditional ecological knowledge (TEK) is appropriate for consideration at Superfund sites. TEK is defined as the knowledge of and relationship with a particular place over time, thus, the Saint Regis Mohawk Tribe (SRMT) has a vested interest in both assisting in the evaluation of the Grasse River Superfund Site and in the eventual restoring of its traditional grounds. This report hopes to help by filling in data gaps and by more adequately (from a Mohawk standpoint) describing, assessing, and documenting current shoreline conditions and attempting to draw conclusions on past conditions to thus better inform future remediation activities, habitat reconstruction and replantings.

Ultimately, the SRMT (the Federally recognized governing body for the southern portion of the Mohawk Territory of Akwesasne), envisions restored cultural uses and access to harvest and collect in the historic Indian Meadow lots also referred to as lower Grasse River Superfund Site. Areas of interest for Agency (i.e. NYSDEC) collaboration on restoring habitat beneficial uses concentrate on the polygons considered New York State Forest Preserve (NYSFP).

1.0 INTRODUCTION

1.1 Objectives

The Mohawks of Akwesasne possess a historic and cultural relationship with and knowledge of the lower Grasse River corridor. This relationship is important not just on a local and immediate level, but globally, and is representative of a land-based cultural need that will be more and more felt as time goes by and we further lose our connection to and relationship with our natural world. To this end, a project was undertaken to combine the knowledge of a local botanist with that of a local Mohawk traditional medicine person in the field. The combination of scientific ecological knowledge (SEK) and traditional ecological knowledge (TEK) produces a much broader vision and a productive partnership that can address multiple aspects of ecosystem health and future remediation goals associated with reuse of the lower Grasse River Superfund Site area. While SEK is strictly objective, TEK brings in an aspect of "reciprocal respect and obligation between humans and the non-human world" (Kimmerer 2002). This pairing of SEK and TEK is in conjunction with the Saint Regis Mohawk Tribe's (SRMT's) Akwesasne Cultural Restoration Program (ACR) designed to promulgate and perpetuate current traditional knowledge in many fields important to the Mohawks (language, hunting, fishing, medicines, traditional foods, etc.). This report addresses the ethnobotanical portion of the project and presents its findings. It will assess vegetation data with both TEK and SEK as a working basis and will elucidate the TEK value of the lower Grasse River corridor, also known as "Indian Meadows" (or Tsi ienhontakwáhtha).

Specifically, this project is designed to assess culturally significant plant species that are of interest to the Mohawks of Akwesasne with the direct involvement of tribal members conversant in traditional plant uses, and to discuss restoration of cultural uses as a part of future remediation benefits. This study design and report was an attempt to fill data gaps of previous flora surveys conducted by Arconic (formerly Alcoa) during Habitat Delineation Assessment (HDA) studies (2015 and 2016). During the HDA studies, one of the study objectives outlined in the Agency (USEPA, NYSDEC, and SRMT) approved work plan included identification of

historical and current plant species of Mohawk cultural significance. However, Arconic and their field team did not include any personnel qualified to make this field determination, nor did they report on species of Mohawk cultural significance present in the lower Grasse River from a previous list provided by SRMT (ALCOA Inc. 2016a and 2016b). Therefore, this report attempts to provide information useable by Federal, State, and Tribal Resource Agency managers on the Grasse River Superfund Site for habitat reconstruction design and planning. In addition, it will be used to guide agencies involved in restoring cultural uses in the St. Lawrence River AOC at Massena/Akwesasne.

1.2 Project Area

The lower Grasse River is in St. Lawrence County in New York State in the town of Massena. The current area of concern encompasses the stretch of the river between the Massena Power Canal and the St. Lawrence River. "The United States maintains that Akwesasne, the Mohawk territory of the federally – recognized Saint Regis Mohawk Tribe (SRMT), as described in the 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55, includes land on both banks of the lower Grasse River, as well as land located along the St. Lawrence River downstream of the Site, together known as the Indian Meadows" (USEPA 2013). This study concentrates on polygons within the historic Indian Meadows as described in the 1796 Treaty. To simplify these into manageable areas in the limited amount of field survey time provided, surveys targeted polygons in what is now referred to as New York State Forest Preserve (NYSFP) parcels and additional areas of interest adjacent these parcels present on both sides of the river within this corridor (Figure 1 and 2). Landscape within these polygons varies from open herbaceous meadows to shrub thicket to forested areas. Previous studies (ALCOA Inc. 2016a and 2016b) documented and described the structural characteristics, dominant plant species composition, and habitat types of the shoreline but failed to take into account quality of habitat as determined by traditional use characters. Of particular interest from both an ecological and a cultural standpoint are the herbaceous meadow areas and, in general, the medicinal and food plants found throughout the study area.

Marsh meadows found associated with river shorelines and the edges provided by wooded shores provide habitat variation which permits the continuance of plant species that

require a more open habitat. Since most of the pre-European settlement landscape in northern New York consisted of dense forest cover, these river valleys, floodplains, and edges were an important factor in the occurrence and perpetuation of certain habitat-specific plants used for medicine, food, clothing, dyes and building material, especially as waterways provided a convenient corridor for gathering practices by boat.

1.3 Cultural Significance

Hough, in A History of St. Lawrence and Franklin Counties, New York, discusses the 1796 treaty and quotes, regarding the meadows on either side of the river:

...the Tract equal to six miles square, reserved in the sale made by the commissioners of the land-office of the said state, to Alexander Macomb, to be applied to the use of the Indians of the village of St. Regis, shall still remain so reserved." In addition, "The said deputies having suggested, that the Indians of St. Regis have built a mill on Salmon River, and another on Grass River, and that the meadows on Grass River are necessary to them for hay; in order, therefore, to secure to the Indians of the said village, the use of the said mills and meadows, in case they should hereafter appear not to be included within the above tract, so to remain reserved; it is, therefore also agreed and concluded between the said deputies, the said agents and the said William Constable and Daniel McCormick, for themselves and their associates, purchasers under the said Alexander Macomb, of the adjacent lands, that there shall be reserved, to be applied to the use of the Indians of the said village of St. Regis, in like manner as the said tract is to remain reserved, a tract of one mile square, at each of the said mills, and the meadows on both sides of the said Grass River, form the said mills thereon, to its confluence with the river St. Lawrence (emphasis added). (Hough 1853:145-146).

When 'hay' is used in the colloquial sense one may envision fodder for grazing animals. Hay, though, can often refer to dried grasses, legumes, or other herbaceous plants. Many traditional foods and medicines were harvested and prepared this way from grasses, legumes, and herbaceous plants. Some were dried and some were ground into flour. Groundnut and Cattail

are just some of the plants that can be ground into flour and were found growing in abundance along the lower Grasse River in the summer of 2017. It is easy to surmise that these species were in even greater abundance during the era of mills. In Kanien'kéha (Mohawk language) ohonte'shón:'a is a word used for various plants and encompasses all that which grows inclusive of the grasses, medicines, and the food. Indication of the historic abundance of grasses and plants on the lower Grasse River is detailed in the Kanien'kéha name for the Indian Meadows; tsi iehontakwáhtha which means, "where you pick grass", or "where the grass is picked". Further clues to the harvesting within these grass meadows lies in a historical map (pre-1850s) with the name 'ey-en-saw-ye', and which when spelled correctly in Kanien'keha is 'ienséhsawe' which roughly translates to 'go there and collect again' (Hough 1853, Jock 2015). This word and language used implies not that they may or might return, but it is definite that they will return and do so repeatedly. This emphasizes the importance of the location and the vast variety of the resources it provided for the Mohawks of Akwesasne.

When applying traditional teachings, specialized knowledge of knowing plants, a cultural relationship with plants, and application of place names and language, the Mohawk historic use of Indian Meadows is redefined to something more meaningful than 'hay'. The potential for language barriers in the 18th century and misinterpretations of the significance of the plants to Mohawks does exist, which may have led to historic and current misunderstandings of the significance of the Indian Meadows to the Mohawk people. It is not known if a survey of the plant species during the late 18th or early 19th century exists prior to the alteration of the lower Grasse River by dredging for power production and accommodation. If this historic flora survey exists, it would more clearly define the historical plant availability and abundance for use.

The importance of these shoreline shelves to the Mohawks is again illustrated by a statement from Jan 14, 1800. Simeon DeWitt says:

The meadows consist of narrow strips along the margin of the river where inundations have prevented the growth of timber. They lie in a number of patches, of from half a chain to three or four chains in width, making in the whole extent, which is about six miles not exceeding sixty acres altogether as nearly as I could judge. The grass on them, with small exceptions, is all wild grass. Their value, though of no very great appendage to the adjoining land, is however

esteemed as almost inestimable by Indians, who consider the clearing of land as a matter entirely beyond their power to accomplish. (Hough 1853; Jock 2015; Amrhein 2017).

Perhaps DeWitt did not realize, at least at that date, the reasons for the respect accorded these meadows by the Mohawk people. Easy access to the medicinal and food plants along the shorelines as well as clay for pottery and the abundant fish, fowl, and other wildlife created an ideal collecting situation.

The Mohawks possess a relationship with and deep respect for plants that goes beyond identification and knowledge of plant physiology and anatomy. Robin Kimmerer, when speaking in an interview about sweetgrass (*Hierochloe odorata*) (a plant much revered by the Mohawks and other Native Americans), elucidates one aspect of this relationship:

One of the fascinating things we discovered in the study was the relationship between the harvesters and the sweetgrass. We looked into how the sweetgrass tolerated various levels of harvesting and we found that it flourished when it was harvested. The Western paradigm of "if you leave those plants alone, they'll do the best" wasn't the case at all. The indigenous paradigm of "if we use a plant respectfully, it will stay with us and flourish' if we ignore it or treat it disrespectfully, it will go away" was exactly what we found. Restoring the plant meant that you also had to restore the harvesters. The harvesters created the disturbance regime with enlivened the regeneration of the sweetgrass. To me, that's a powerful example from the plants, the people, and the symbiosis between them, of the synergy of restoring plants and culture.

from: http://www.biohabitats.com/newsletters/traditional_ecological_knowledge/

In reflecting on that human-plant relationship and specific mention of sweetgrass, it was noted during 2017 sweet grass was not identified during any survey of targeted polygons. However, in past elder interviews and dialogue with community members who still remember their elders harvesting from the Indian Meadows, sweet grass was one of the species referenced as historically picked from the lower Grasse River (Jock 2015). Land disturbance (i.e. mowed lawns) and Mohawk harvesters removed from this location due to neighboring land disputes and industrial contamination in the 20th century may be a reason for reduced observance of this species today. Sweet grass is only one example of plant species historically harvested.

Not only is it important to remember the Mohawk's traditional connection to the lower Grasse River as set forth in the 1796 treaty, but it is also important for all of us to remember that a connection to one's land is vital for the health of a community as well as for society in general. It is important to work to preserve traditional botanical (and, in general, ecological) knowledge for the sake of broadening scientific understanding, but also because this knowledge and a relationship to the land is disappearing with each generation due to disruption of land-based activities (see, for instance, Davidson-Hunt 2005). The practice of gathering from the wild creates a holistic approach to health and living. The ways in which we learn and gain knowledge as well as how we use that knowledge exercises our minds and mental capacity. The act of movement and travel to obtain what is to be gathered takes strength and an able body to traverse the river. The relationship with the plants/natural world and the respect given to them addresses the spirituality and ceremonial aspects of life. And finally, the peaceful feeling of being in nature, of slowing down enough to see what each plant is, in the search for the one, eases that stress and anxiety that comes from living in a such a fast-paced society. There is more healing, physicality, and knowledge to gathering practices than what is commonly known.

We should not forget plants in our current race for instant communication and faster internet. Plants themselves do not want to be forgotten, and it is the duty according to traditional teachings of onkwehón:we (original people or indigenous peoples) to be the seed carriers and protectors. We all, onkwehón:we, as well as all others, should do all we can to not become more estranged from our source of life. In the specific instance of the lower Grasse River and the ACRP, here is a chance to restore both a place and a people. For a comprehensive overview of the history of the Mohawk's relationship with the lower Grasse River and to better understand their relationship to plants, see Jock 2015 and Parker 1910.

1.4 Project Team

All field work was conducted by SRMT Environment Division staff with the assistance of local botany expertise provided by Anne Johnson. This provided a unique pairing in the field for all field surveys of a trained botanist with SEK (Anne) and 4-year trained Medicine and Healing Apprentice (Sa'teiokwen Bucktooth) from the ACRP to provide TEK (see Figure 3).

Jay Wilkins, SRMT Grasse River Superfund Project Manager was field crew leader, boat operator, and field QA/QC manager. GPS coordinates for estimated polygon sampling points were determined in the field based on GIS layers provided by NYSDEC.

All project management, coordination, work plan design, and consultation with NYSDEC was conducted through Jessica L. Jock, SRMT St. Lawrence River AOC Program Manager.

Collectively, this team provided unique river and plant knowledge never combined before.

2.0 METHODS

The study area consisted of a tiered approach to address areas (i.e. 'polygons') of interest within the historic Indian Meadows as interpreted by the Mohawks in 1796. There were 23 polygons identified as sampling areas. These were labeled with Location IDs as follows: NYSFP (n=12), NYSFP-Seaway (n=2), and IM polygons (n=9) (Figures 1-2). Within each NYSFP or NYSFP-Seaway polygon percent (%) cover of the dominant plant species in a 5-meter radius plot was recorded during July and early August of 2017. If a polygon consisted of more than one cover type (shrub, forest, herbaceous) then more than one plot was surveyed. In addition, all plant species noted during meanders through each polygon were recorded, and each polygon was revisited in late September to capture late flowering species. Each polygon was given a quality/value ranking based on presence/absence of culturally useful species (specific to medicine and food TEK) and ease of access from the river (1 – poor, to 5 – excellent). All plant species present in the polygons were assigned a Mohawk cultural use (M – medicinal, F – food, MF – both) by ACRP staff during the field season.

Specimens of some species were collected and pressed to begin a reference collection to be stored at SRMT (Figure 3). Voucher specimens were only collected if the population supported it and the plant was diagnostically complete. The location and date of each voucher specimen was recorded and entered into an Access database managed by Anne Johnson.

For complete methods see Jock 2017.



FIGURE 1. LOCATIONS OF NYSDEC AND IM PARCELS ON LOWER GRASSE RIVER



FIGURE 2. LOCATIONS OF NYSDEC PARCELS ON GRASSE RIVER NEAR ALCOA BRIDGE.





FIGURE 3. PLANT SAMPLES WERE COLLECTED AND IDENTIFIED USING SEK AND TEK

3.0 RESULTS

Plots were established and measured in the NYSFP and NYSFP-Seaway polygons and lists of species present within each were recorded. In each IM polygon species were noted from vantage points on the water and recorded. Each NYSFP and NYSFP-Seaway polygon was also characterized as F-forest, S-shrub, or H - herbaceous and was given a Mohawk cultural use rank. A total of 231 species were recorded within the polygons, at least 139 species or 60% of which had known medicinal or food (or both) use assignments (Table 1). Some species labelled as M can be considered food as well, as according to Mohawk traditional teachings, food *is* medicine. 130 were M or MF (56%), 43 were F or MF (19%), and 6 (3%) were just F. The IMs polygons registered a total of 156 species while the NYSFP and NYSFP-Seaway polygons registered 205 species. The percent of native species in the polygons ranged from a high of 83 to a low of 58 (if excluding IM01, primarily mowed lawn). The polygons with the most non-native species were generally dominated by lawns or mowed areas (NYSFP01 and NYSFP11). Appendix 1 contains dominant species and % cover by polygon surveyed. Appendix 2 is a complete list of species found in the polygons.

The land along the river and within the polygons is, in general, characterized by young forest and shrub thickets edged by narrow to wide herbaceous meadows which in turn are bordered by narrow bands of emergent vegetation (EV) and a bit wider band of submerged aquatic vegetation (SAV). High water most of the summer would have affected EV and SAV, though this study concentrated on the land and so its influence would be considered minimal on reported findings.

The polygons are generally very narrow and range from approximately half of an acre to 20 acres. Most polygons had some shrub and/or tree coverage, these often festooned by grape (*Vitis riparia*) vines. Table 1 gives a summary of each polygon visited, with all recorded species by polygon surveyed (n=23) reported in Appendix 4.

The second growth woods and shrub thickets are characterized by sparse to thick shrub layers of buckthorn (*Rhamnus cathartica*), sumac (*Rhus hirta*), grey dogwood (*Cornus racemosa*), and nannyberry (*Viburnum lentago*) over an understory dominated by a diverse variety of low growing plants including enchanter's nightshade (*Circaea lutetiana*), white avens (*Geum canadense*), hog peanut (*Amphicarpea bracteata*), and often a high proportion of bare

ground or moss covered soil. Other common woody plants in the shrub layer include introduced honeysuckle (*Lonicera* x *bella*) and closer to shore, alder (*Alnus incana*) and silky and red osier dogwoods (*Cornus amomum* and *C. sericea*). The treed polygons ranged from mature to immature forest over sparse to thick understories. Dominant trees recorded included willows (*Salix* spp.), oaks (*Quercus macrocarpa* and *Q. rubra*), basswood (*Tilia americana*), elm (*Ulmus americana*), and ashes (*Fraxinus americana* and *F. pennsylvanica*). Hawthorns (*Crataegus* spp.) were common and at times dominant in polygons with more open areas.

The herbaceous communities are characterized by dense thickets of primarily reed canary grass (*Phalaris arundinacea*) with pockets of stinging nettle (*Urtica dioica*). Throughout the reed canary grass/nettle thickets, ground-nut (*Apios americana*), hog peanut, and bindweed (*Calystegia sepium*) are intertwined. Angelica (*Angelica atropurpurea*) towers above in places. Other commonly occurring plants in these meadows include Joe-pye-weed (*Eutrochium maculatum*), jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), Canada anemone (*Anemone canadensis*), and germander (*Teucrium canadense*). Here and there Canada Bluejoint (*Calamagrostis canadensis*) appears with the reed canary grass. Directly on the shore are narrow emergent communities of spikerush (*Eleocharis palustris*), bur-reeds (*Sparganium* spp.), bulrush (*Schoenoplectus tabernaemontanii*), arrowheads (*Sagittaria* spp.), and pickerelweed (*Pontederia cordata*). These in turn are bordered by SAV communities in which tapegrass (*Vallisneria americana*) is the most common and abundant species.

Dominant species within the polygons as determined by plot data and field notes are shown in Table 2 along with the number of polygons in which they occur (frequency). Most are considered medicinally or otherwise useful.

The most frequently occurring species within the polygons were groundnut, reed canary grass, and Canada goldenrod (*Solidago canadensis*), each with a frequency value of 100% (i.e. occurring in all polygons). The next most commonly occurring species were bindweed with a frequency value of 81% and wild grape, purple loosestrife (*Lythrum salicaria*), and willow each with a frequency value of 77%. Frequencies of the most commonly occurring species are listed in Table 3. As with the most dominant species, the most frequent are also overwhelmingly considered culturally useful. Many plants, while not dominant or frequent, are common throughout the corridor and are of cultural importance, for instance, Angelica, boneset (*Eupatorium perfoliatum*), and mullein (*Verbascum thapsus*). Some plants encountered were

sporadic and not commonly encountered but are considered a valuable resource as they are culturally important (for instance, sweet flag (*Acorus calamus*) and American hazel (*Corylus americana*).

Though a number of species in the lower Grasse River are considered non-native, they are still considered culturally valuable, as traditionally the Mohawks have embraced a policy of "adopt and adapt". Thus, the native/non-native status is not necessarily indicative of poor habitat quality. There were 64 (28%) non-native species recorded within the project area. Table 4 lists the non-native species and their cultural use indicators. Burdock, for example, has both food and medicinal use. The root has a starchy quality and can be eaten as a potato substitute, it can be boiled into a tea and used for its blood purifying and diuretic properties, the leaves can be used as a poultice for burns and sprains, and it also contains inulin which helps diabetics regulate their blood sugar levels.

The current study documents more plants than were documented in previous studies (Alcoa 2016a and 2016b) and provides information that was not included previously (medicinal and food value). The previous studies were not specifically oriented toward cultural use values and did not focus on the NYSFPs, NYSFP-Seaways, and IMs polygons. The differences in the plant lists generated between those studies and the current study can be attributed to a number of factors, including methods of gathering data (Alcoa used transects at fixed points along the shoreline and recorded dominant species while this study aimed at complete lists of species present for each polygon), acquaintance with local flora (this study had the advantage of utilizing a local botanist), and differences in times of year as well as water levels.

Appendix 5 contains a list of plants recorded during the Alcoa 2015-2016 Habitat Delineation Assessment (HDA) Studies with cultural use annotations added by ACR staff from a literature review. The original Alcoa table may contain some misidentifications and notes were added where appropriate. Not all species listed may be present within the study area but none were removed from the table (e.g., it is questionable that either wild cherry (*Prunus avium*) or fox grape (*Vitis labrusca*) occurs in northern NY).

No federal or NYS threatened or endangered plants were encountered, though one species on NYS's watch list was present on the shoreline of NYSFP12 (wheat sedge, *Carex atherodes*) (Young 2017).

TABLE 1. SPECIES, CULTURAL VALUE, COVER TYPE, AND RANK IN EACH POLYGON.

Polygon ID	GR Superfund Transects (T1-T72) ¹	Number of Species	Acreage ²	Percent Medicinal or Food ³	Cover Type	Average Rank
NYSFP01	T62.5- T64.5N	79	0.61	76	lawn/shrub/treed	4.0
NYSFP02	T58.5-T59N	71	0.35	63	pasture/forest/shrub/herbaceous	4.3
NYSFP03	T45-T50N	80	7.83	76	pasture/forest/shrub	4.3
NYSFP04	T41.5-T43N	23	1.75	65	herbaceous	4.0
NYSFP05	T34-T35N	61	4.00	77	shrub/treed/herbaceous	4.0
NYSFP06	T27.5-T29N	24	2.00	79	herbaceous	3.5
NYSFP07	T14-T15.5N	60	0.76	73	shrub	5.0
NYSFP08	T9-T12N	60	1.39	72	shrub	4.0
NYSFP09	T5.5-T8S	47	1.85	79	open forest/shrub	5.0
NYSFP10	T46-T53S	60	7.25	80	lawn/open forest/shrub	5.0
NYSFP11	T54-T55.5S	31	1.15	77	lawn/herbaceous	4.0
NYSFP12	T57-T60S	44	1.50	70	shrub	4.5
NYSFP- SW01	T67-T68.5N	60	15.00	72	herbaceous/shrub	4.7
NYSFP- SW02	T70-T72.5N	26	20.00	69	herbaceous/scattered trees	5.0
IM01	T59-T62.5N	4	2.88	2	mowed lawn	1.0
IM02	T50-T55.5N	63	11.00	68	pasture	5.0
IM03	T43-T45N	48	7.80	75	herbaceous/shrub	4.0
IM04	T39-T41.5N	49	5.83	69	meadow	4.0
IM05	T30.5-T34N	56	9.93	77	shrub/herbaceous/treed	5.0
IM06	T29.5- T30.5N	29	2.12	79	herbaceous/shrub/sparse trees	4.0
IM07	T30.5-T32S	35	0.50	71	herbaceous/some mowing	4.0
IM08	T39.5-T44S	63	4.00	71	forest	5.0
IM09	T60-T65S	52	13.00	58	herbaceous/emergent	4.4
TOTALSPP		231	122.5	60		

Notes:

^{1.} Transect references are approximations for consistency with USEPA Record of Decision (ROD) delineated areas on the Grasse River Superfund Site Study Area (USEPA 2013).

^{2.} Polygon sizes are approximate and based on old tax maps and Indian Meadow Lot No. (1945).

^{3.} See Appendix 2. for complete list of species and identification as medicine, food, or both. 60% of the species identified were found useful based on current knowledge. Historic use may have been even higher.

TABLE 2. DOMINANT SPECIES AND CULTURAL VALUE FROM EACH POLYGON.

Specific uses for the listed plants may be found in numerous publications, including Moreman 1998, Erichsen-Brown 1979, Herrick 1995, Jock, 2015, and Millsapaugh 1974

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)	Number of Polygons Occurrence
Alder, Speckled or Tag	Alnus incana	M	13
Anemone, Canada	Anemone canadensis	M	12
Groundnut, Wild bean	Apios americana	MF	22
Milkweed, Common	Asclepias syriaca	MF	14
Aster,Tall white	Symphyotrichum lanceolatum	-	14
Bindweed, Hedge	Calystegia sepium	MF	18
Thistle, Canada	Cirsium arvense	M	12
Dogwood, Silky	Cornus amomum	M	14
Dogwood, Stiff or Gray	Cornus racemosa	M	12
Dogwood, Red Osier	Cornus sericea	M	3
Hawthorn	Crataegus spp.	MF	9
Joe-pye Weed, Spotted	Eutrochium maculatum	M	16
Ash, White	Fraxinus americana	M	11
Bedstraw, Cleavers	Galium mollugo	MF	13
Jewelweed, Touch-me-not	Impatiens capensis	MF	16
Honeysuckle, European	Lonicera x bella	M	11
Moneywort	Lysimachia nummularia	-	4
Reed Canary Grass	Phalaris arundinacea	-	22
Common Reed	Phragmites australis	-	10
Oak	Quercus spp.	MF	10
Buckthorn, Common	Rhamnus cathartica	M	15
Sumac, Staghorn	Rhus hirta	MF	12
Raspberry, Red	Rubus idaeus	MF	10
Willow	Salix spp.	M	17
Bulrush, Soft-stem; Tule	Scirpus atrovirens	-	6
Goldenrod, Canada	Solidago canadensis	MF	22
Nightshade, Deadly	Solanum dulcamara	M	12
Basswood	Tilia americana	M	14
Clover	Trifolium spp.	MF	6
Cattail, Narrow-leaved	Typha angustifolia	MF	12
Nettle, Stinging	Urtica dioica	MF	12
Vervain, Blue	Verbena hastata	MF	10
Nannyberry	Viburnum lentago	MF	14
Grape, Frost or Riverbank	Vitis riparia	MF	17

TABLE 3. FREQUENCY OF SPECIES ACROSS ALL POLYGONS.

Only one of the most frequent plants has no stated medicinal or other use (*Symphyotrichum lanceolatus*).

Common Name	Scientific Name	Frequency (%)
Groundnut, Wild bean	Apios americana	100%
Canary-grass, Reed	Phalaris arundinacea	100%
Goldenrod, Common	Solidago canadensis	100%
Bindweed, Hedge	Calystegia sepium	81%
Loosestrife, Purple	Lythrum salicaria	77%
Willow	Salix spp.	77%
Grape, Frost or Riverbank	Vitis riparia	77%
Joe-pye-weed, Spotted	Eutrochium maculatum	73%
Jewelweed, Spotted	Impatiens capensis	73%
Angelica, Purple-stemmed	Angelica atropurpurea	68%
Buckthorn, Common	Rhamnus cathartica	68%
Milkweed, Common	Asclepias syriaca	64%
Aster, Tall white	Symphyotrichum lanceolatum	64%
Dogwood, Silky	Cornus amomum	64%
Sow-thistle	Sonchus arvensis	64%
Basswood	Tilia americana	64%
Nannyberry	Viburnum lentago	64%
Vetch, Cow	Vicia cracca	64%
Alder, Speckled or Tag	Alnus incana	59%
Horsetail, Field	Equisetum arvense	59%
Bedstraw, White	Galium mollugo	59%
Bulrush, Soft-stem; Tule	Schoenoplectus tabernaemontani	59%
Anemone, Canada	Anemone canadensis	55%
Thistle, Canada	Cirsium arvense	55%
Dogwood, Stiff or Gray	Cornus racemosa	55%
Parsnip, Wild	Pastinaca sativa	55%
Sumac, Staghorn	Rhus hirta	55%
Nightshade, Deadly	Solanum dulcamara	55%
Bur-reed, Giant	Sparganium eurycarpum	55%
Cat-tail, Narrow-leaved	Typha angustifolia	55%
Nettle, Stinging	Urtica dioica	55%

Table 4. Non-native species and their cultural use indicator.

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Grasses, Sedges, and Rushes		
Redtop; Black bent	Agrostis gigantea	
Brome, Smooth	Bromus inermis	
Grass, Orchard	Dactylis glomerata	
Quackgrass, Witch-grass	Elymus repens	
Reed, Common; Reedgrass	Phragmites australis	
Herbaceous		
Yarrow	Achillea millefolium	M
Burdock, Common	Arctium minus	MF
Rocket, Yellow	Barbarea vulgaris	
Bindweed, Hedge	Calystegia sepium	MF
Chickweed, Mouse-eared	Cerastium fontanum	M
Chicory	Cichorium intybus	MF
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Crown-vetch	Coronilla varia	
Queen Anne's lace	Daucus carota	MF
Helleborine, Weed-orchid.	Epipactis helleborine	
Bedstraw, White	Galium album	M
Gill-over-the-ground	Glechoma hederacea	
Sunflower	Helianthus hirsutus	
Frog's-bit	Hydrocharis morsus-ranae	
Live-forever	Hylotelephium telephium	
St. John's-wort	Hypericum perforatum	M
Elecampane	Inula helenium	M
Iris, Yellow	Iris pseudacorus	M
Motherwort	Leonurus cardiaca	M
Daisy, Ox-eye	Leucanthemum vulgare	M
Butter-and-eggs	Linaria vulgaris	M
Bird's foot trefoil	Lotus corniculatus	
Water horehound, European	Lycopus europaeus	M
Creeping-Charlie, Moneywort	Lysimachia nummularia	
Loosestrife, Purple	Lythrum salicaria	M
Black medick	Medicago lupulina	
Sweet-clover, White	Melilotus albus	M

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Milfoil, Eurasian water	Myriophyllum spicatum	
Bartsia, Red; Eyebright	Odontites vernus	
Parsnip, Wild	Pastinaca sativa	
Water-pepper, Smartweed	Persicaria hydropiper	MF
Lady's thumb	Persicaria maculosa	
Plantain, Common	Plantago major	MF
Cinquefoil, Rough-fruited	Potentilla recta	
Heal-all	Prunella vulgaris	M
Buttercup, Common	Ranunculus acris	
Cursed crowfoot	Ranunculus sceleratus	
Black-eyed-Susan	Rudbeckia hirta	M
Dock, Curly	Rumex crispus	M
Mustard, Hedge	Sisymbrium officinale	
Nightshade, Deadly	Solanum dulcamara	M
Sow-thistle	Sonchus arvensis	M
Woundwort	Stachys palustris	
Stitchwort, Lesser	Stellaria graminea	
Tansy	Tanacetum vulgare	M
Dandelion	Taraxacum officinale	MF
Clover, Alsike	Trifolium hybridum	M
Clover, Red	Trifolium pratense	MF
Clover, White (or Lawn)	Trifolium repens	MF
Coltsfoot	Tussilago farfara	M
Mullein	Verbascum thapsus	M
Vetch, Cow	Vicia cracca	
Shrubs		
Honeysuckle, European	Lonicera x bella	M
Trees		
Box-elder	Acer negundo	
Apple MF	Malus pumila	
Buckthorn, Common	Rhamnus cathartica	M
Locust, Black	Robinia pseudoacacia	
Willow, tree	Salix spp.	M
Vines		
Bittersweet, Oriental	Celastrus orbiculata	

4.0 DISCUSSION

The cultural use polygon rankings are overall high due to the presence of many easily accessible medicinal plants of interest within each. It is easy to see the value of the river and its shoreline and how it could have been used by the Mohawks of Akwesasne. Many traditional medicines were found in many of the polygons, and more often than not, were relatively easy to gain access to from a boat. In some areas, it was possible to gather right from the boat. The diversity of plant life could easily supply the communities needs for health, food, and ceremonial uses. Some plants are used strictly for food, or strictly for medicine, but some can be used for both as well as have cultural and ceremonial uses. The value of the river and its shoreline is illustrated by the dangling, easily collected flowers of basswood draped over the shoreline, the groundnut covering the banks, the nettles lining the edges, the rice in the shallow water, and the hawthorns covered with fruit on the bank tops.

Though some polygons are impacted by grazing and lawns, all contained some useful plant species. While some have a lower quality ranking than others, none were considered of little to no value. Even the grazed and weedy areas support plants of interest, for instance mullein, turtlehead (*Chelone glabra*), and St. John's-wort (*Hypericum spp.*) grow where the habitat has been disturbed. The presence of sweetflag in an otherwise unremarkable polygon is indicative of the nature of the lower Grasse River. It occurs at the water edge of a steep, thicket covered bank of little ecologic interest, thus illustrating the importance of the whole area and the inability to predict the presence of desirable plant species by habitat quality.

Medicinal plants are found all up and down the lower Grass River corridor (i.e. Indian Meadows). One specific area included a stretch of about 50 yards of Ononnó:ron or Sweet Flag growing in abundance. This medicine is still widely known and used by the Mohawks of Akwesasne but due to development in wetlands, the plant is becoming harder and harder to find. This medicinal plant is used in a number of ways – dried or boiled into a tea for sickness, chewed to relieve sinus problems, and used for ceremonial purposes. Finding such an abundance of the plant was both exciting and disheartening as it was found in a location of such high contamination with fear of utilization.

The lack of harvest and use over a prolonged period can have drastic negative effects on not only the plant life but also on plant information. This can already be seen in Appendix 2 as

there is a knowledge gap in the cultural use for either Food (F) or Medicine (M), despite most of those species being native to America. Knowledge holders who cease using the land and its resources simultaneously cease being able to pass that knowledge down, hindering their use by future generations. This, in addition to forced colonization, made it near impossible for such knowledge to be carried on. Fear of incarceration and even death halted the discussion and practice of anything remotely tied to ceremony and as many everyday practices are tied to ceremony, this meant a number of traditional practices ceased. Even with contemporary efforts of decolonization, there is a still a stigma of secrecy due to those past fears. As a result, there are these gaps in our knowledge as evidenced in Appendix 2. For example, previous Mohawk medicinal plant lists included Potamogeton sp. and Carex sp. as having medicinal and ceremonial value. However, they are not listed in this report.

The presence of American hazel, not known to occur elsewhere in the county or at all within the northernmost counties in NY was a surprise and may illustrate the importance of the Grasse and St. Lawrence rivers as corridors for the movement of more southern and western species. Alternatively, it may provide some evidence of a trade route that existed between the peoples in the southern portions of the state and the more northern; with people carrying and trading useful plants in their travels.

Invasive species are not exceedingly prevalent within the study area but should be monitored over time and especially during construction and remediation, and any boats should be inspected for stray plant material before and after launching into the river. Buckthorn is prevalent and is one of the most commonly encountered plants within the project area (including both native and non-native species). Purple loosestrife is scattered throughout on the shoreline and into the herbaceous thickets but it is not overwhelmingly dominant anywhere in particular. Parsnip (*Pastinaca sativa*) is also not uncommon, though not dominant. Common reed (*Phragmites australis*) is present in a few polygons and care should be taken not to disturb and spread it further. Japanese knotweed (*Fallopia cuspidata*) did not grow in a targeted polygon but does occur in the study area so care should be taken not to dislodge and spread it to other areas. European Water Milfoil (*Myriophyllum spicatum*) is present in the shallower water of IM02. Reed canary grass is everywhere and is by far the most dominant and commonly occurring grass in the study area. While this grass may very well have been present within the project area historically, it is likely that the current population is non-native. Strong evidence indicates that

native genotypes of this species formerly occurred in New York but are likely extirpated or very rare in the state (Jakubowski et al. 2012, 2014); stands of reed canary grass that are currently common throughout New York are very likely all the nonnative genotype (Jakubowski et al. 2014).

A collection of pressed plants from the lower Grasse River corridor was started and will act as the foundation for the future collection and documentation of the area flora. All plant vouchers were pressed and labelled, and collection details entered into an Access database.

5.0 SUMMARY

As can be seen from the Tables and Appendices, in particular Table 2 (dominants and their medicinal value) and Table 3 (frequency and their medicinal value), the lower Grasse River is rife with useful plants. The Grasse River is a veritable pharmacy, with easy access to both medicinal and food plants, as well as to clay for pottery and to abundant fish and wildlife.

In Arconic's draft Habitat Reconstruction Plan design, they only included 20 species as culturally important species proposed to be included in seed mix and/or replantings (Arconic 2017). Of those 20, some may have medicinal or food use, but may not have the same cultural significance as other species found occurring along the lower Grasse River identified in this report. For example, Arconic has listed Red maple as a culturally significant species. However, it is the Sugar maple (not Red maple) that is cited as the leader of the trees in the Ohén:ton Karihwatéhkwen, valued highly as a 'first medicine' of the year, used with other traditional foods (i.e. strawberry drink, corn mush, and wedding corn bread) during ceremony, and has a significant cultural role for Mohawks and Haudenosaunee people. And while Bur-reed (*Sparganium eurycarpum*) occurred with 55% frequency over the areas surveyed in 2017 (Table 3) may have medicinal properties and was listed by Arconic as selected species of cultural significance for the Mohawks (Arconic 2017), other species presented in this report may be more highly valued as medicinal and food species currently present on the lower Grasse River. ACRP staff identified at least 139 species of medicinal and/or food use species occurring along the lower Grasse River in 2017 (Appendix 2) and identified 66 species of plants for re-planting

suggestions (Appendix 3). These species should be factored into future replanting design and cultural use objectives on the lower Grasse River.

6.0 RECOMMENDATIONS

Remediation should address not only the river in its current state but should consider past cultural uses and values to thus attempt to address and redress these issues where appropriate. If mitigation of shoreline habitat in places to be affected by the remediation activities is to occur, first and foremost it is recommended that the re-establishment of cultural resource values take priority, and that the replanted area be monitored as time goes by.

The 1796 Treaty outlined land that was to be reserved for the Mohawks along the lower Grasse River. In only a few generations, the Mohawks of Akwesasne have been estranged from the resources that grow in the Indian Meadows. Even though there may be other residents along the river now, it is important to acknowledge the Mohawks relationship to land, water, and the plants there. Those with medicinal and traditional food TEK desire to have land along the lower Grasse River remediated and restored from contaminants to allow a reasonably sized piece of land (or multiple smaller parcels) for clean habitat to allow future traditional practice use, harvest, and ingestion of plants without fear of contaminants. Signage and designated areas should be included in restored use design plans of the river so that Akwesasro:non can access, and future generations will be knowledgeable of the Indian Meadows and medicines growing therein.

Replanting should be done in a culturally significant manner to begin the healing process of the land as well as its people. This methodology should be more clearly defined through consultation with SRMT Environment Division, Akwesasne community leaders, and TEK holders. For example, mechanisms should be created for Mohawk people to be engaged in the plantings of the Indian Meadows using traditional teachings, traditional planting practices, heritage seeds, seed songs, and seed ceremonies along the lower Grasse River.

Appropriate seed and/or stock may be collected from nearby locations and used for plantings or may be purchased from dealers whose seed is as local as possible. Non-native and potentially invasive species should not be planted, and careful attention should be given to the movement of soil and possible plant hitchhikers throughout the project area.

Appendix 3 is a list of priority medicine/food species compiled by members of the ACRP staff along with an assessment made as to which could reseed on their own from species currently present in the lower Grasse River, versus plants that would need to have a seed stock brought in. This list is not comprehensive and may not reflect the opinion of all or other traditional medicine or forage food collectors.

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APPENDIX 1.

DOMINANT SPECIES BY POLYGON IN 2017

Plot ID	Stratu m	Percent Cover	Dominant Species	QualRank
NYSFP01	Shrub	6	Silky dogwood, pussy willow	3
	Herb	98	Reed canary grass, groundnut, bindweed, red raspberry	
NYSFP01	Tree	1	White ash	4
	Shrub	1	Buckthorn	
	Herb	98	Lawn	
NYSFP01	Tree	70	Hawthorn, American elm, wild grape over all	4
	Shrub	80	Hawthorn, buckthorn	
	Herb	40	Poison ivy, rose, Canada anemone, ground ivy	
NYSFP01	Tree	60	Red oak, while ash, basswood, woodbine over all	5
	Shrub	50	European honeysuckle, highbush cranberry, sumac	
	Herb	99	Canada goldenrod, groundnut, white sweet clover	
NYSFP02	Shrub	40	Hawthorn, grape	
	Herb	85	reed canary grass, fox sedge	
NYSFP02	Tree	90	Hawthorn, apple, European honeysuckle, grape over all	4
	Herb	35	Jewelweed, moneywort	
NYSFP02	Herb	90	Bulrush, Joe-pye-weed	5
NYSFP02	Herb	95	Bulrush, blue vervain, reed canary grass	4
NYSFP03	Tree	40	Willow, hawthorn	4
	Shrub	30	Alder, buckthorn	
	Herb	60	Alsike clover, dandelion, Reed canary grass, moneywort	
NYSFP03	Tree	80	Green ash, box elder	4
	Herb	40	Jewelweed, buckthorn seedlings	
NYSFP03	Shrub	80	Buckthorn, alder, nannyberry	5
	Herb	60	Deadly nightshade, jewelweed	
NYSFP04	Herb	100	Reed canary grass, nettle	4
NYSFP05	Tree	15	White ash	4
	Shrub	75	Sumac, European honeysuckle, buckthorn	
	Herb	85	Canada goldenrod, scouring rush, horsetail	
NYSFP06	Herb	100	Cattail, reed canary grass	3
NYSFP06	Herb	100	Reed canary grass, Canada goldenrod, jewelweed	4

Plot ID	Stratu m	Percent Cover	Dominant Species	QualRank
NYSFP07	Shrub	100	European honeysuckle, grey dogwood, hawthorn	5
	Herb	100	Joe-pye-weed, Canada goldenrod, groundnut, aster	
NYSFP08	Shrub	90	Alder, European honeysuckle, sumac, buckthorn	4
	Herb	30	Canada anemone, buckthorn seedlings	
NYSFP08	Shrub	15	Sumac, nannyberry, pussy willow, European honeysuckle	
	Herb	100	Reed canary grass, Canada goldenrod, horsetail	
NYSFP09	Tree	30	Bur oak, white ash	5
	Shrub	90	Buckthorn, European honeysuckle, alder	
	Herb	55	Moss, sensitive fern, enchanters nightshade, baneberry	
NYSFP10	Tree	10	White birch, sugar maple	5
	Shrub	60	Nannyberry, buckthorn, European honeysuckle	
	Herb	100	Large-leaf aster, moss, early goldenrod	
NYSFP11	Herb	100	Brome grass, reed canary grass, milkweed	4
NYSFP12	Shrub	90	Silky dogwood, grey dogwood, buckthorn	4
	Herb	95	Groundnut, Canada goldenrod, grape	
NYSFP12	Shrub	80	Silky dogwood, grey dogwood, nannyberry	5
	Herb	100	Groundnut, reed canary grass, sweetflag, goldenrod	
NYSFP- SW01	Herb	100	Reed canary grass, field thistle, blue vervain, Angelica	5
NYSFP- SW01	Shrub	80	Grey dogwood	5
	Herb	50	Canada goldenrod, blackberry, raspberry, grey dogwood	
NYSFP- SW01	Herb	100	Red bent, bedstraw, tansy, reed canary grass	4
NYSFP- SW02	Tree	20	Cottonwood, willow	5
	Herb	100	Reed canary grass, nettle	
IM09	Herb	100	Groundnut, reed canary grass	4
IM09	Herb	100	Reed canary grass, nettle, Phragmites	5
IM09	Herb	92	Reed canary grass, cattail, pickerelweed	4
IM09	Shrub	50	Alder	4
	Herb	75	Lake sedge, yellow iris, germander, reed canary grass	
IM09	Shrub	85	silky dogwood, nannyberry, alder, white ash, buckthorn	5
	Herb	100	Canada goldenrod, Angelica, groundnut, jewelweed	

APPENDIX 2

ALL SPECIES RECORDED IN ALL POLYGONS

An asterisk (*) indicates a non-native species. Plant nomenclature follows Weldy and Werier (2009). Common names are a matter of preference, and in this report for the most part also follow Weldy and Werier (2009). Salix sp. and Rosa sp. have no native/non-native status but I gave the Rosa a native value for calculations. Solidago canadensis could be S. altissima, no effort to distinguish was made for this project.

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Ferns and Fern Allies		
Fern, Lady	Athyrium filix-femina	M
Fern, Fancy	Dryopteris intermedia	
Horsetail, Field	Equisetum arvense	M
Scouring rush	Equisetum hyemale	
Fern, Ostrich	Matteuccia struthiopteris	F
Fern, Sensitive	Onoclea sensibilis	M
Fern, New York	Thelypteris noveboracensis	
Grasses, Sedges, and Rushes		
Redtop; Black bent	*Agrostis gigantea	
Bent, Autumn or Upland	Agrostis perennans	
Bluestem, Big	Andropogon gerardii	
Brome, Smooth	*Bromus inermis	
Bulrush, River	Bolboschoenus fluviatilis	
Grass, Bluejoint	Calamagrostis canadensis	
Sedge, Awned	Carex atherodes	
Sedge, Porcupine	Carex hystericina	
Sedge, Lake	Carex lacustris	
Sedge, Tussock	Carex stricta	
Sedge	Carex trichocarpa	
Sedge, Fox	Carex vulpinoidea	
Grass, Orchard	*Dactylis glomerata	
Spikerush, Creeping	Eleocharis palustris	
Quackgrass, Witch-grass	*Elymus repens	
Wild-rye, Virginia	Elymus virginicus	
Mannagrass, Fowl	Glyceria striata	
Rush, Jointed	Juncus articulatus	

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Rush, Dudley's	Juncus dudleyi	
Rush, Soft; Candle-rush	Juncus effusus	
Rush, Path	Juncus tenuis	
Canary-grass, Reed	Phalaris arundinacea	
Reed, Common; Reedgrass	*Phragmites australis	
Bluegrass, Fowl	Poa palustris	
Bulrush, Soft-stem; Tule	Schoenoplectus tabernaemontani	
Bulrush	Scirpus atrovirens	
Woolgrass; Bulrush	Scirpus cyperinus	
Wild rice	Zizania aquatica	F
Herbaceous Plants	-	
Mercury, Three-seeded	Acalypha virginica	
Yarrow	*Achillea millefolium	M
Sweet flag	Acorus americanus	M
Baneberry, Red	Actaea spicata	M
Agrimony	Agrimonia gryposepala	M
Garlic, Wild	Allium canadense	F
Ragweed	Ambrosia artemisiifolia	
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Thimbleweed	Anemone virginiana	
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Sarsaparilla, Wild	Aralia nudicaulis	MF
Burdock, Common	*Arctium minus	MF
Jack-in-the-pulpit	Arisaema triphyllum	M
Milkweed, Swamp	Asclepias incarnata	
Milkweed, Common	Asclepias syriaca	MF
Rocket, Yellow	*Barbarea vulgaris	
Bur-marigold	Bidens cernua	
Beggar-ticks; Stick-tight	Bidens frondosa	
False-nettle	Boehmeria cylindrica	
Marsh marigold; Cowslip	Caltha palustris	F
Bindweed, Hedge	*Calystegia sepium	MF
Bellflower, Marsh	Campanula aparinoides	
Chickweed, Mouse-ear	*Cerastium fontanum	M

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Coontail	Ceratophyllum demersum	
Turtlehead	Chelone glabra	M
Chicory	*Cichorium intybus	MF
Water-hemlock, Bulblet	Cicuta bulbifera	M
Water-hemlock	Cicuta maculata	M
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Canada	*Cirsium arvense	M
Thistle, Bull or Common	*Cirsium vulgare	M
Horseweed	Conyza canadensis	
Crown-vetch	*Coronilla varia	
Queen Anne's lace	*Daucus carota	MF
Tick-trefoil, Giant	Desmodium canadense	M
Cucumber, Wild	Echinocystis lobata	M
Waterweed; Elodea	Elodea canadensis	
Helleborine; Weed-orchid	*Epipactis helleborine	
Pilewort, Fireweed	Erechtites hieracifolia	
Fleabane, Daisy	Erigeron annuus	M
Boneset	Eupatorium perfoliatum	M
Aster, Large-leaf	Eurybia macrophylla	M
Joe-pye-weed, Spotted	Eutrochium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Strawberry, Wild	Fragaria virginiana	MF
Bedstraw, Cleavers	Galium aparine	MF
Bedstraw, White	*Galium mollugo	M
Cranesbill, Purple	Geranium maculatum	
Avens, White	Geum canadense	M
Gill-over-the-ground	*Glechoma hederacea	
Sunflower	*Helianthus hirsutus	
Frog's-bit	*Hydrocharis morsus-ranae	
Waterleaf, Virginia	Hydrophyllum virginianum	
Live-forever	*Hylotelephium telephium	
St. John's-wort	*Hypericum perforatum	M
St. John's-wort	Hypericum punctatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Elecampane	*Inula helenium	M
Iris, Yellow	*Iris pseudacorus	M
Iris, Wild; Blue flag	Iris versicolor	M

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Lettuce, Blue	Lactuca biennis	
Vetchling	Lathyrus palustris	M
Duckweed	Lemna minor	
Motherwort	*Leonurus cardiaca	M
Daisy, Ox-eye	*Leucanthemum vulgare	M
Butter-and-eggs	*Linaria vulgaris	M
Bird's foot trefoil	*Lotus corniculata	
Bugle-weed, European	*Lycopus europaeus	M
Water horehound	Lycopus uniflorus	M
Loosestrife, Fringed	Lysimachia ciliata	
Moneywort	*Lysimachia nummularia	
Loosestrife, Purple	*Lythrum salicaria	M
Solomon's seal, False	Maianthemum racemosum	M
Black medick	*Medicago lupulina	
Sweet-clover, White	*Melilotus alba	M
Mint, Field	Mentha canadensis	M
Monkeyflower, Common	Mimulus ringens	
Bergamot, Wild	Monarda fistulosa	M
Forget-me-not	Myosotis laxa	M
Milfoil, Eurasian water	*Myriophyllum spicatum	
Naiad	Najas flexilis	
Pondlily; Spatterdock	Nuphar rubrodisca	M
Water-lily, White	Nymphaea odorata	
Bartsia, Red; Eyebright	*Odontites vernus	
Evening-primrose	Oenothera parviflora	M
Lady's sorrel	Oxalis stricta	F
Parsnip, Wild	*Pastinaca sativa	
Ditch-stonecrop	Penthorum sedoides	
Ground cherry, Clammy	Physalis heterophylla	MF
Plantain, Common	*Plantago major	MF
Smartweed, Water	Persicaria amphibium	
Water-pepper; Smartweed	*Persicaria hydropiper	MF
Lady's thumb	*Persicaria maculosa	
Pickerel-weed	Pontederia cordata	
Pondweed	Potamogeton epihydrus	
Pondweed, Long-leaved	Potamogeton nodosus	
Pondweed, Red-head	Potamogeton richardsonii	

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Pondweed	Potamogeton sp.	
Cinquefoil, Rough-fruited	*Potentilla recta	
Heal-all	*Prunella vulgaris	M
Shinleaf	Pyrola elliptica	
Buttercup, Common	*Ranunculus acris	
Cursed crowfoot	*Ranunculus sceleratus	
Rose, Wild	Rosa sp.	M
Blackberry, Common	Rubus allegheniensis	MF
Raspberry, Red	Rubus idaeus	MF
Raspberry, Black	Rubus occidentalis	MF
Black-eyed-Susan	*Rudbeckia hirta	M
Dock, Curly	*Rumex crispus	M
Wapato; Duck-potato	Sagittaria latifolia	
Bloodroot	Sanguinaria canadensis	M
Skullcap, Mad-dog	Scutellaria lateriflora	M
Mustard, Hedge	*Sisymbrium officinale	
Parsnip, Water	Sium suave	
Nightshade, Deadly	*Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	MF
Goldenrod, Early	Solidago juncea	M
Goldenrod, Rough	Solidago rugosa	
Sow-thistle	*Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Woundwort	*Stachys palustris	
Stitchwort, Lesser	*Stellaria graminea	
Aster, Tall white	Symphyotrichum lanceolatum	
Aster; Calico	Symphyotrichum lateriflorum	M
Aster, New England	Symphyotrichum novae-angliae	
Aster, Cornel-leaf	Symphyotrichum firmum	
Tansy	*Tanacetum vulgare	M
Dandelion	*Taraxacum officinale	MF
Germander, Wood-sage	Teucrium canadense	M
Meadow-rue, Tall	Thalictrum pubescens	M
Poison ivy	Toxicodendron radicans	M
Clover, Alsike	*Trifolium hybridum	M
Clover, Red	*Trifolium pratense	MF
Clover, White or Lawn	*Trifolium repens	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Coltsfoot	*Tussilago farfara	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Nettle, Stinging	*Urtica dioica	MF
Tapegrass	Vallisneria americana	
Mullein	*Verbascum thapsus	M
Vervain, Blue	Verbena hastata	MF
Vervain, White	Verbena urticifolia	M
Vetch, Cow	*Vicia cracca	
Violet	Viola sp.	MF
Shrubs		
Alder, Speckled or Tag	Alnus incana	M
Buttonbush	Cephalanthus occidentalis	M
Dogwood, Pagoda	Cornus alternifolia	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Gray	Cornus foemina	M
Dogwood, Round-leaved	Cornus rugosa	M
Dogwood, Red osier	Cornus sericea	M
Hazlenut, American	Corylus americana	F
Honeysuckle, Fly	*Lonicera x bella	M
Cherry, Choke	Prunus virginiana	MF
Sumac, Staghorn	Rhus hirta	MF
Currant, Wild black	Ribes americanum	F
Willow, Bebb's	Salix bebbiana	M
Pussy-willow	Salix discolor	M
Willow, shrub	Salix sp.	M
Arrowwood	Viburnum dentatum	M
Nannyberry	Viburnum lentago	MF
Cranberry, Highbush	*Viburnum opulus	MF
Prickly ash	Zanthoxylum americanum	M
Trees		
Box-elder	*Acer negundo	
Maple, Red	Acer rubrum	
Maple, Silver	Acer saccharinum	
Maple, Sugar	Acer saccharum	MF
Shadbush, Juneberry	Amelanchier sp.	F
Birch, Paper or White	Betula papyrifera	M
Birch, Gray	Betula populifolia	M

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Hawthorn, Scarlet	Crataegus coccinea	MF
Hawthorn, Large-thorn	Crataegus macracantha	MF
Hawthorn	Crataegus sp.	MF
Ash, White	Fraxinus americana	M
Ash, Green	Fraxinus pennsylvanica	M
Butternut	Juglans cinerea	MF
Black Walnut	Juglans nigra ,	MF
Apple	*Malus pumila	MF
Spruce, Red	Picea rubens	M
Pine, White	Pinus strobus	MF
Cottonwood; Poplar	Populus deltoides	M
Aspen, Quaking	Populus tremuloides	M
Cherry, Fire or Pin	Prunus pensylvanica	F
Cherry, Black	Prunus serotina	MF
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Oak, Northern red	Quercus rubra	MF
Buckthorn, Common	*Rhamnus cathartica	M
Locust, Black	*Robinia pseudoacacia	
Willow, Peach-leaf	Salix amygdaloides	M
Willow, tree	*Salix sp.	M
Basswood	Tilia americana	M
Elm, American	Ulmus americana	M
Woody Vines		
Bittersweet, Oriental	*Celastrus orbiculata	
Virginia creeper	Parthenocissus vitacea	M
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Propagation Method*
Maple (Sugar or Silver)	Acer spp.	
Yarrow	Achillea millefolium	Seed stock/re-planting
Sweet Flag	Acorus americanus	Seed stock/re-planting
Angelica	Angelica atropurpurea	
Wild Ginger	Asarum canadense	Seed stock/re-planting
Burdock	Arctium minus	Self-seed
Jack-in-the-pulpit	Arisaema triphyllum	Seed stock/re-planting
Milkweed	Asclepias syriaca	Self-seed
Shagbark hickory	Carya ovata	Seed stock/re-planting
Chicory	Cichorium intybus	Self-seed
Goldthread	Coptis trifolia	Seed stock/re-planting
Hazel	Corylus spp.	Seed stock/re-planting
Hawthorn	Crataegus spp.	Seed stock/re-planting
Queen Anne's lace	Daucus carota	Self-seed
Horsetail	Equisetum spp.	Self-seed
Boneset	Eupatorium perfoliatum	Seed stock/re-planting
Joe-pye Weed	Eutrochium maculatum	
Strawberry	Fragaria virginiana	Self-seed
Ash ²	Fraxinus spp.	Seed stock/re-planting
Witch Hazel	Hamamelis virginiana	
Goldenseal	Hydrastis canadensis	Seed stock/re-planting
St. John's-wort	Hypericum punctatum	Seed stock/re-planting
Jewelweed	Impatiens capensis	Self-seed
Elecampane	Inula helenium	Seed stock/re-planting
Butternut	Juglans cinerea	
Black walnut	Juglans nigra	Seed stock/re-planting
Cardinal Flower	Lobelia cardinalis	
Lobelia	Lobelia spp.	
Solomon's Seal	Maianthemum racemosum	Seed stock/re-planting
Mint	Mentha canadensis	
Bergamont	Monarda fistulosa	
Catnip	Nepeta cataria	
Yellow Water Lily	Nuphar odorata	Seed stock/re-planting

Common Name	Scientific Name	Propagation Method*
White Water Lily	Nymphaea odorata	Seed stock/re-planting
Evening Primrose	Oenothera spp.	Self-seed
Ginseng	Panax quinquefolius	Seed stock/re-planting
White Pine	Pinus strobus	Self-seed
Plantain	Plantago spp.	Self-seed
Smartweed	Polygonum spp.	
Cherry, Black	Prunus serotina	Seed stock/re-planting
Oak	Quercus spp.	
Sumac	Rhus hirta	
Blackberry	Rubus allegheniensis	Self-seed
Raspberry	Rubus idaeus	Self-seed
Curled Dock	Rumex crispus	Self-seed
Willow, Black	Salix nigra	Self-seed
Elderberry	Sambucus spp.	Seed stock/re-planting
Bloodroot	Sanguinaria canadensis	Seed stock/re-planting
Skullcap	Scutellaria spp.	Seed stock/re-planting
Goldenrod	Solidago spp.	Self-seed
Meadowsweet	Spiraea spp.	Seed stock/re-planting
Purple Aster	Symphyotrichum novae-angliae	Self-seed
Dandelion	Taraxacum officinale	
Cedar	Thuja occidentalis	Seed stock/re-planting
Basswood	Tilia americana	Self-seed
Red Clover	Trifolium pratense	
Trillium, Red	Trillium spp.	Seed stock/re-planting
Coltsfoot	Tussilago farfara	Self-seed
Cattail	Typha spp.	
Slippery Elm	Ulmus rubra	Seed stock/re-planting
Nettle	Urtica gracilis	
Blueberry	Vaccinium angustifolium	
Mullein	Verbascum thapsus	Self-seed
High Bush Cranberry	Viburnum opulus	Seed stock/re-planting
Grape	Vitis riparia	
Prickly Ash	Zanthoxylum americanum	Seed stock/re-planting

Notes:

- 1. The list includes some species that could occur in the project area (but currently do not) as appropriate habitat is present. This list only includes species found or likely to be found in the project area rated by ACR staff and does not include any rated fungus species. A full list is available at the Environmental Division offices.
- 2. Ash trees are culturally significant, but due to emerald ash borer management plans may not be suitable.

APPENDIX 4

ALL SPECIES RECORDED IN ALL POLYGONS SURVEYED

Plant nomenclature follows Weldy and Werier (2009). Common names are a matter of preference, and in this report for the most part also follow Weldy and Werier (2009).

Cultural Use Indicator based on identification and current knowledge by only one person; Sa'teiokwen Bucktooth. Other uses may apply that are not identified below as food or medicine, and other Akwesasro:non may consume species currently not listed as food or medicine.

No Location ID: IM01 due to primarily mowed lawns.

Common Name	Scientific Name	Cultural Use Indicator
		(F=Food, M=Medicine)
Box-elder	Acer negundo	
Redtop; Black bent	Agrostis gigantea	
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Bur-marigold	Bidens cernua	
Beggar-ticks; Stick-tight	Bidens frondosa	
Brome, Smooth	Bromus inermis	
Bindweed, Hedge	Calystegia sepium	MF
Chicory	Cichorium intybus	MF
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Bull or Common	Cirsium vulgare	M
Horseweed	Conyza canadensis	
Dogwood, Silky	Cornus amomum	M
Dogwood, Red osier	Cornus sericea	M
Hawthorn	Crataegus sp.	MF
Grass, Orchard	Dactylis glomerata	
Queen Anne's lace	Daucus carota	MF
Quackgrass, Witch-grass	Elytrigia repens	
Horsetail, Field	Equisetum arvense	M
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Strawberry, Wild	Fragaria virginiana	MF
Ash, White	Fraxinus americana	M
Ash, Red or Green	Fraxinus pennsylvanica	M
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
Gill-over-the-ground	Glechoma hederacea	
Sunflower	Helianthus hirsutus	
Waterleaf, Virginia	Hydrophyllum virginianum	
St. John's-wort	Hypericum perforatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Yellow	Iris pseudacorus	M
Iris, Wild; Blue flag	Iris versicolor	M
Butter-and-eggs	Linaria vulgaris	M
Honeysuckle, Fly	Lonicera x bella	M

Water horehound, European	Lycopus europaeus	M
Loosestrife, Purple	Lythrum salicaria	M
Black medick	Medicago lupulina	
Sweet-clover, White	Melilotus alba	M
Evening-primrose	Oenothera parviflora	M
Lady's sorrel	Oxalis stricta	F
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Canary-grass, Reed	Phalaris arundinacea	
Ground cherry, Clammy	Physalis heterophylla	MF
Bluegrass, Fowl	Poa palustris	
Smartweed, Water	Polygonum amphibium	
Heal-all	Prunella vulgaris	M
Cherry, Choke	Prunus virginiana	MF
Oak, Northern red	Quercus rubra	MF
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Currant, Wild black	Ribes americanum	
Rose, Wild	Rosa sp.	M
Raspberry, Red	Rubus idaeus	MF
Raspberry, Black	Rubus occidentalis	MF
Pussy-willow	Salix discolor	M
Bulrush	Scirpus atrovirens	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Tansy	Tanacetum vulgare	M
Basswood	Tilia americana	M
Poison ivy	Toxicodendron radicans	M
Clover, Alsike	Trifolium hybridum	M
Clover, Red	Trifolium pratense	MF
Coltsfoot	Tussilago farfara	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Vervain, White	Verbena urticifolia	M
Cranberry, Highbush	Viburnum opulus	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Mercury, Three-seeded	Acalypha virginica	
Bent, Autumn or Upland	Agrostis perennans	
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Beggar-ticks; Stick-tight	Bidens frondosa	
Sedge, Granular	Carex granularis	
Sedge, Porcupine	Carex hystericina	
Sedge, Lake	Carex lacustris	
Sedge, Fox	Carex vulpinoidea	
Chickweed, Mouse-eared	Cerastium fontanum	M
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Hazlenut, American	Corylus americana	F
Hawthorn, Large-thorned	Crataegus macracantha	MF
Queen Anne's lace	Daucus carota	MF
Cucumber, Wild	Echinocystis lobata	M
Spikerush	Eleocharis erythropoda	
Helleborine; Weed-orchid	Epipactis helleborine	
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Boneset	Eupatorium perfoliatum	M
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
Mannagrass, Fowl	Glyceria striata	
Jewelweed, Spotted	Impatiens capensis	MF
Rush, Soft; Candle-rush	Juncus effusus	
Rush, Path	Juncus tenuis	
Motherwort	Leonurus cardiaca	M
Daisy, Ox-eye	Leucanthemum vulgare	M
Honeysuckle, Fly	Lonicera x bella	M
Water horehound, European	Lycopus europaeus	M
Moneywort; Creeping- Charlie	Lysimachia nummularia	

Loosestrife, Purple	Lythrum salicaria	M
Apple	Malus pumila	MF
Mint, Field	Mentha arvensis	M
Monkeyflower, Common	Mimulus ringens	
Fern, Sensitive	Onoclea sensibilis	M
Lady's sorrel	Oxalis stricta	F
Ditch-stonecrop	Penthorum sedoides	
Canary-grass, Reed	Phalaris arundinacea	
Plantain, Common	Plantago major	MF
Lady's thumb	Polygonum persicaria	
Buttercup, Common	Ranunculus acris	
Cursed crowfoot	Ranunculus sceleratus	
Raspberry, Black	Rubus occidentalis	MF
Dock, Curly	Rumex crispus	M
Bulrush	Scirpus atrovirens	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Live-forever	Sedum telephium	
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Woundwort	Stachys palustris	
Stitchwort, Lesser	Stellaria graminea	
Dandelion	Taraxacum officinale	MF
Meadow-rue, Tall	Thalictrum pubescens	M
Poison ivy	Toxicodendron radicans	M
Clover, Alsike	Trifolium hybridum	M
Clover, Red	Trifolium pratense	MF
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	
Yarrow	Achillea millefolium	M
Agrimony	Agrimonia gryposepala	M
Redtop; Black bent	Agrostis gigantea	
Garlic, Wild	Allium canadense	
Alder, Speckled or Tag	Alnus incana	M
Ragweed	Ambrosia artemisiifolia	
Anemone, Canada	Anemone canadensis	M
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Aster, New England	Aster novae-angliae	
Aster, Purple-stemmed	Aster puniceus	
Rocket, Yellow	Barbarea vulgaris	
Beggar-ticks; Stick-tight	Bidens frondosa	
Bindweed, Hedge	Calystegia sepium	MF
Chickweed, Mouse-eared	Cerastium fontanum	M
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Stiff or Gray	Cornus foemina	M
Dogwood, Red osier	Cornus sericea	M
Hawthorn, Scarlet	Crataegus coccinea	MF
Hawthorn	Crataegus sp.	MF
Helleborine; Weed-orchid	Epipactis helleborine	
Horsetail, Field	Equisetum arvense	M
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Boneset	Eupatorium perfoliatum	M
Strawberry, Wild	Fragaria virginiana	MF
Ash, White	Fraxinus americana	M
Ash, Red or Green	Fraxinus pennsylvanica	M
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
St. John's-wort	Hypericum punctatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Elecampane	Inula helenium	M
Rush, Dudley's	Juncus dudleyi	
Lettuce, Blue	Lactuca biennis	
Butter-and-eggs	Linaria vulgaris	M

Honeysuckle, Fly	Lonicera x bella	M
Water horehound, European	Lycopus europaeus	M
Loosestrife, Fringed	Lysimachia ciliata	
Moneywort; Creeping-	Lysimachia nummularia	
Charlie		
Sweet-clover, White	Melilotus alba	M
Forget-me-not	Myosotis laxa	M
Fern, Sensitive	Onoclea sensibilis	M
Lady's sorrel	Oxalis stricta	F
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Plantain, Common	Plantago major	MF
Water-pepper; Smartweed	Polygonum hydropiper	MF
Cottonwood; Poplar	Populus deltoides	M
Cherry, Choke	Prunus virginiana	MF
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Currant, Wild black	Ribes americanum	
Raspberry, Red	Rubus idaeus	MF
Willow	Salix x rubens	M
Skullcap, Mad-dog	Scutellaria lateriflora	M
Mustard, Hedge	Sisymbrium officinale	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Dandelion	Taraxacum officinale	MF
Meadow-rue, Tall	Thalictrum pubescens	M
Fern, New York	Thelypteris noveboracensis	
Basswood	Tilia americana	M
Poison ivy	Toxicodendron radicans	M
Clover, Alsike	Trifolium hybridum	M
Clover, Red	Trifolium pratense	MF
Coltsfoot	Tussilago farfara	M
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Vervain, White	Verbena urticifolia	M
Nannyberry	Viburnum lentago	MF
Violet	Viola sp.	MF
Grape, Frost or Riverbank	Vitis riparia	MF
Prickly ash	Zanthoxylum americanum	M
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Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Swamp	Asclepias incarnata	
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster, New England	Aster novae-angliae	
Aster, Cornel-leaf	Aster puniceus	
Brome, Smooth	Bromus inermis	
Bindweed, Hedge	Calystegia sepium	MF
Thistle, Canada	Cirsium arvense	M
Dogwood, Silky	Cornus amomum	M
Ash, White	Fraxinus americana	M
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Wild; Blue flag	Iris versicolor	M
Canary-grass, Reed	Phalaris arundinacea	
Pussy-willow	Salix discolor	M
Goldenrod, Common	Solidago canadensis	M
Woundwort	Stachys palustris	
Stitchwort, Lesser	Stellaria graminea	
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	
Redtop; Black bent	Agrostis gigantea	
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Aster, Cornel-leaf	Aster puniceus	
Bindweed, Hedge	Calystegia sepium	MF
Bittersweet, Oriental	Celastrus orbiculata	
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Hawthorn	Crataegus sp.	MF
Cucumber, Wild	Echinocystis lobata	M
Horsetail, Field	Equisetum arvense	M
Scouring rush	Equisetum hyemale	
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Ash, White	Fraxinus americana	M
Bedstraw, Cleavers	Galium aparine	M
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
St. John's-wort	Hypericum perforatum	M
Butternut	Juglans cinerea	MF
Butter-and-eggs	Linaria vulgaris	M
Honeysuckle, Fly	Lonicera x bella	M
Loosestrife, Purple	Lythrum salicaria	M
Sweet-clover, White	Melilotus alba	M
Mint, Field	Mentha arvensis	M
Bergamot, Wild	Monarda fistulosa	M
Naiad Naiad	Najas flexilis	
Evening-primrose	Oenothera parviflora	M
Fern, Sensitive	Onoclea sensibilis	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Parsnip, Wild	Pastinaca sativa	112

Canary-grass, Reed	Phalaris arundinacea	
Bluegrass, Fowl	Poa palustris	
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Raspberry, Red	Rubus idaeus	MF
Black-eyed-Susan	Rudbeckia hirta	M
Wapato; Duck-potato	Sagittaria latifolia	
Willow	Salix x rubens	M
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Woundwort	Stachys palustris	
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Tapegrass	Vallisneria americana	
Nannyberry	Viburnum lentago	MF
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Bindweed, Hedge	Calystegia sepium	MF
Cucumber, Wild	Echinocystis lobata	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Jewelweed, Spotted	Impatiens capensis	MF
Walnut, Black	Juglans nigra	MF
Loosestrife, Purple	Lythrum salicaria	M
Sweet-clover, White	Melilotus alba	M
Evening-primrose	Oenothera parviflora	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Aspen, Quaking	Populus tremuloides	M
Wapato; Duck-potato	Sagittaria latifolia	
Pussy-willow	Salix discolor	M
Willow, tree	Salix sp.	M
Bulrush, River	Scirpus fluviatilis	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator
		(F=Food, M=Medicine)
Box-elder	Acer negundo	
Yarrow	Achillea millefolium	M
Shadbush, Juneberry	Amelanchier sp.	F
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Aster, New England	Aster novae-angliae	
Beggar-ticks; Stick-tight	Bidens frondosa	
False-nettle	Boehmeria cylindrica	
Water-hemlock	Cicuta maculata	M
Dogwood, Stiff or Gray	Cornus foemina	M
Crown-vetch	Coronilla varia	
Hawthorn	Crataegus sp.	MF
Queen Anne's lace	Daucus carota	MF
Tick-trefoil, Giant	Desmodium canadense	M
Horsetail, Field	Equisetum arvense	M
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Strawberry, Wild	Fragaria virginiana	MF
Bedstraw, White	Galium mollugo	M
Bedstraw, Ditch	Galium palustre	
Avens, White	Geum canadense	M
St. John's-wort	Hypericum perforatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Lettuce, Blue	Lactuca biennis	
Honeysuckle, Fly	Lonicera x bella	M
Water horehound, European	Lycopus europaeus	M
Bugle-weed, Water	Lycopus uniflorus	M
horehound		
Loosestrife, Purple	Lythrum salicaria	M
Sweet-clover, White	Melilotus alba	M
Mint, Field	Mentha arvensis	M
Evening-primrose	Oenothera parviflora	M
Fern, Sensitive	Onoclea sensibilis	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Pickerel-weed	Pontederia cordata	
Cherry, Fire or Pin	Prunus pensylvanica	F
Oak, Northern red	Quercus rubra	MF

Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Blackberry, Common	Rubus allegheniensis	MF
Raspberry, Red	Rubus idaeus	MF
Wapato; Duck-potato	Sagittaria latifolia	
Willow, Bebb's	Salix bebbiana	M
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Goldenrod, Rough	Solidago rugosa	
Sow-thistle	Sonchus arvensis	M
Tansy	Tanacetum vulgare	M
Basswood	Tilia americana	M
Poison ivy	Toxicodendron radicans	M
Elm, American	Ulmus americana	M
Tapegrass	Vallisneria americana	
Mullein	Verbascum thapsus	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Yarrow	Achillea millefolium	M
Redtop; Black bent	Agrostis gigantea	
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Bluestem, Big	Andropogon gerardii	
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Aster, Tall white	Aster lanceolatus	
Aster, New England	Aster novae-angliae	
Aster, Cornel-leaf	Aster puniceus	
Grass, Bluejoint	Calamagrostis canadensis	
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Tussock	Carex stricta	
Water-hemlock	Cicuta maculata	M
Thistle, Canada	Cirsium arvense	M
Dogwood, Pagoda	Cornus alternifolia	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Tick-trefoil, Giant	Desmodium canadense	M
Horsetail, Field	Equisetum arvense	M
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Ash, White	Fraxinus americana	M
Bedstraw, White	Galium mollugo	M
Iris, Yellow	Iris pseudacorus	M
Iris, Wild; Blue flag	Iris versicolor	M
Vetchling	Lathyrus palustris	M
Honeysuckle, Fly	Lonicera x bella	M
Loosestrife, Purple	Lythrum salicaria	M
Sweet-clover, White	Melilotus alba	M
Water-lily, White	Nymphaea odorata	
Bartsia, Red; Eyebright	Odontites vernus	
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Cottonwood; Poplar	Populus deltoides	M
Aspen, Quaking	Populus tremuloides	M
Oak, Northern red	Quercus rubra	MF
Buckthorn, Common	Rhamnus cathartica	M

Sumac, Staghorn	Rhus hirta	MF
Locust, Black	Robinia pseudoacacia	
Pussy-willow	Salix discolor	M
Willow, tree	Salix sp.	M
Willow	Salix x rubens	M
Bulrush	Scirpus atrovirens	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Meadow-rue, Tall	Thalictrum pubescens	M
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Tapegrass	Vallisneria americana	
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Cranberry, Highbush	Viburnum opulus	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Baneberry, Red	Actaea spicata	M
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Sarsaparilla, Wild	Aralia nudicaulis	MF
Aster, Tall white	Aster lanceolatus	
Aster, Cornel-leaf	Aster puniceus	
Fern, Lady	Athyrium filix-femina	M
Birch, Paper or White	Betula papyrifera	M
Birch, Gray	Betula populifolia	M
Bindweed, Hedge	Calystegia sepium	MF
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Canada	Cirsium arvense	M
Hazlenut, American	Corylus americana	F
Wild-rye, Virginia	Elymus virginicus	
Helleborine; Weed-orchid	Epipactis helleborine	
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Strawberry, Wild	Fragaria virginiana	MF
Ash, White	Fraxinus americana	M
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Yellow	Iris pseudacorus	M
Iris, Wild; Blue flag	Iris versicolor	M
Honeysuckle, Fly	Lonicera x bella	M
Moneywort; Creeping-	Lysimachia nummularia	141
Charlie		
Mint, Field	Mentha arvensis	M
Fern, Sensitive	Onoclea sensibilis	M
Lady's sorrel	Oxalis stricta	F
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Canary-grass, Reed	Phalaris arundinacea	111
Cherry, Black	Prunus serotina	MF
Cherry, Choke	Prunus virginiana	MF
Shinleaf	Pyrola elliptica	
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Buttercup, Common	Ranunculus acris	
Buckthorn, Common	Rhamnus cathartica	M
Willow	Salix x rubens	M
Bloodroot	Sanguinaria canadensis	M
וטטעוטטו	Dangamara Canadensis	171

Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Meadow-rue, Tall	Thalictrum pubescens	M
Nannyberry	Viburnum lentago	MF
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Maple, Red	Acer rubrum	
Maple, Sugar	Acer saccharum	MF
Yarrow	Achillea millefolium	M
Baneberry, Red	Actaea spicata	M
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Thimbleweed	Anemone virginiana	
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster, Bigleaved	Aster macrophyllus	M
Birch, Paper or White	Betula papyrifera	M
Water-hemlock	Cicuta maculata	M
Dogwood, Pagoda	Cornus alternifolia	M
Dogwood, Stiff or Gray	Cornus foemina	M
Hawthorn	Crataegus sp.	MF
Queen Anne's lace	Daucus carota	MF
Helleborine; Weed-orchid	Epipactis helleborine	
Horsetail, Field	Equisetum arvense	M
Strawberry, Wild	Fragaria virginiana	MF
Ash, White	Fraxinus americana	M
Iris, Wild; Blue flag	Iris versicolor	M
Butter-and-eggs	Linaria vulgaris	M
Honeysuckle, Fly	Lonicera x bella	M
Loosestrife, Fringed	Lysimachia ciliata	
Moneywort; Creeping- Charlie	Lysimachia nummularia	
Loosestrife, Purple	Lythrum salicaria	M
Water-lily, White	Nymphaea odorata	
Evening-primrose	Oenothera parviflora	M
Canary-grass, Reed	Phalaris arundinacea	
Spruce, Red	Picea rubens	M
Heal-all	Prunella vulgaris	M
Cherry, Choke	Prunus virginiana	MF
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Oak, Northern red	Quercus rubra	MF
Buttercup, Common	Ranunculus acris	
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Raspberry, Red	Rubus idaeus	MF

Black-eyed-Susan	Rudbeckia hirta	M
Dock, Curly	Rumex crispus	M
Willow, Bebb's	Salix bebbiana	M
Bulrush, River	Scirpus fluviatilis	
Goldenrod, Common	Solidago canadensis	M
Goldenrod, Early	Solidago juncea	M
Sow-thistle	Sonchus arvensis	M
Dandelion	Taraxacum officinale	MF
Meadow-rue, Tall	Thalictrum pubescens	M
Basswood	Tilia americana	M
Poison ivy	Toxicodendron radicans	M
Clover, Red	Trifolium pratense	MF
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Tapegrass	Vallisneria americana	
Arrowwood	Viburnum dentatum	M
Nannyberry	Viburnum lentago	MF
Cranberry, Highbush	Viburnum opulus	MF
Vetch, Cow	Vicia cracca	
Violet	Viola sp.	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Hog peanut	Amphicarpaea bracteata	MF
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Brome, Smooth	Bromus inermis	
Bindweed, Hedge	Calystegia sepium	MF
Water-hemlock	Cicuta maculata	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Queen Anne's lace	Daucus carota	MF
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Bedstraw, White	Galium mollugo	M
Elecampane	Inula helenium	M
Water horehound, European	Lycopus europaeus	M
Loosestrife, Purple	Lythrum salicaria	M
Mint, Field	Mentha arvensis	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Pussy-willow	Salix discolor	M
Willow, tree	Salix sp.	M
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Woundwort	Stachys palustris	
Tansy	Tanacetum vulgare	M
Meadow-rue, Tall	Thalictrum pubescens	M
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Maple, Red	Acer rubrum	
Sweet flag	Acorus americanus	M
Redtop; Black bent	Agrostis gigantea	
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Aster, New England	Aster novae-angliae	
Aster, Cornel-leaf	Aster puniceus	
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Awned	Carex atherodes	1111
Sedge, Tussock	Carex stricta	
Water-hemlock	Cicuta maculata	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Queen Anne's lace	Daucus carota	MF
Wild-rye, Virginia	Elymus virginicus	1711
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Bedstraw, White	Galium mollugo	M
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Wild; Blue flag	Iris versicolor	M
Duckweed	Lemna minor	141
Bugle-weed, Water	Lycopus uniflorus	M
horehound	Lycopus unifforus	141
Loosestrife, Purple	Lythrum salicaria	M
Mint, Field	Mentha arvensis	M
Parsnip, Wild	Pastinaca sativa	141
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Heal-all	Prunella vulgaris	M
Buckthorn, Common	Rhamnus cathartica	M
Pussy-willow	Salix discolor	M
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	141
Skullcap, Mad-dog	Scutellaria lateriflora	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Tansy Tall	Tanacetum vulgare	M
Meadow-rue, Tall	Thalictrum pubescens	M

Elm, American	Ulmus americana	M
Tapegrass	Vallisneria americana	
Nannyberry	Viburnum lentago	MF
Grape, Frost or Riverbank	Vitis riparia	MF

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Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	
Maple, Sugar	Acer saccharum	MF
Redtop; Black bent	Agrostis gigantea	
Hog peanut	Amphicarpaea bracteata	MF
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Birch, Paper or White	Betula papyrifera	M
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Lake	Carex lacustris	
Sedge, Tussock	Carex stricta	
Sedge, Fox	Carex vulpinoidea	
Coontail	Ceratophyllum demersum	
Chicory	Cichorium intybus	MF
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Stiff or Gray	Cornus foemina	M
Crown-vetch	Coronilla varia	
Queen Anne's lace	Daucus carota	MF
Fleabane, Daisy	Erigeron annuus	M
Boneset	Eupatorium perfoliatum	M
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
St. John's-wort	Hypericum perforatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Lettuce, Blue	Lactuca biennis	
Butter-and-eggs	Linaria vulgaris	M
Honeysuckle, Fly	Lonicera x bella	M
Water horehound, European	Lycopus europaeus	M
Sweet-clover, White	Melilotus alba	M
Mint, Field	Mentha arvensis	M
Pondlily; Spatterdock	Nuphar rubrodisca	M
Evening-primrose	Oenothera parviflora	M
Fern, Sensitive	Onoclea sensibilis	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Sumac, Staghorn	Rhus hirta	MF
Blackberry, Common	Rubus allegheniensis	MF

Raspberry, Red	Rubus idaeus	MF
Wapato; Duck-potato	Sagittaria latifolia	
Bulrush	Scirpus atrovirens	
Woolgrass; Bulrush	Scirpus cyperinus	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Tansy	Tanacetum vulgare	M
Dandelion	Taraxacum officinale	MF
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Nettle, Stinging	Urtica dioica	MF
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Location ID: NYSFP-Seaway02

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	
Groundnut, Wild bean	Apios americana	MF
Bindweed, Hedge	Calystegia sepium	MF
Cucumber, Wild	Echinocystis lobata	M
Boneset	Eupatorium perfoliatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Loosestrife, Purple	Lythrum salicaria	M
Mint, Field	Mentha arvensis	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Smartweed, Water	Polygonum amphibium	
Cottonwood; Poplar	Populus deltoides	M
Raspberry, Red	Rubus idaeus	MF
Willow, Peach-leaf	Salix amygdaloides	M
Willow	Salix x rubens	M
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Germander, Wild.Wood-sage	Teucrium canadense	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Nettle, Stinging	Urtica dioica	MF
Tapegrass	Vallisneria americana	
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Location ID: IM02

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Redtop; Black bent	Agrostis gigantea	
Alder, Speckled or Tag	Alnus incana	M
Ragweed	Ambrosia artemisiifolia	
Groundnut, Wild bean	Apios americana	MF
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Aster, Cornel-leaf	Aster puniceus	
Birch, Gray	Betula populifolia	M
Marsh marigold; Cowslip	Caltha palustris	
Sedge, Fox	Carex vulpinoidea	
Turtlehead	Chelone glabra	M
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Horseweed	Conyza canadensis	
Dogwood, Silky	Cornus amomum	M
Hawthorn	Crataegus sp.	MF
Boneset	Eupatorium perfoliatum	M
Bedstraw, White	Galium mollugo	M
Gill-over-the-ground	Glechoma hederacea	
Elecampane	Inula helenium	M
Iris, Wild; Blue flag	Iris versicolor	M
Rush, Jointed	Juneus articulatus	
Rush, Dudley's	Juncus dudleyi	
Daisy, Ox-eye	Leucanthemum vulgare	M
Butter-and-eggs	Linaria vulgaris	M
Bird's foot trefoil	Lotus corniculata	
Bugle-weed, Water horehound	Lycopus uniflorus	M
Loosestrife, Purple	Lythrum salicaria	M
Mint, Field	Mentha arvensis	M
Milfoil, Eurasian water	Myriophyllum spicatum	1/1
Pondlily; Spatterdock	Nuphar rubrodisca	M
Evening-primrose	Oenothera parviflora	M
Lady's sorrel	Oxalis stricta	F
Canary-grass, Reed	Phalaris arundinacea	
Plantain, Common	Plantago major	MF
Water-pepper; Smartweed	Polygonum hydropiper	MF
Lady's thumb	Polygonum persicaria	-
Cottonwood; Poplar	Populus deltoides	M
Aspen, Quaking	Populus tremuloides	M
Cinquefoil, Rough-fruited	Potentilla recta	

Cherry, Fire or Pin	Prunus pensylvanica	F
Oak, White	Quercus alba	MF
Oak, Northern red	Quercus rubra	MF
Buttercup, Common	Ranunculus acris	
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Pussy-willow	Salix discolor	M
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Stitchwort, Lesser	Stellaria graminea	
Tansy	Tanacetum vulgare	M
Germander, Wild.Wood-sage	Teucrium canadense	M
Meadow-rue, Tall	Thalictrum pubescens	M
Clover, Red	Trifolium pratense	MF
Clover, White or Lawn	Trifolium repens	MF
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Location ID: IM03

Anemone, Canada Groundnut, Wild bean Milkweed, Common Aster, Tall white Brome, Smooth Bindweed, Hedge Coontail Ce Thistle, Canada Dogwood, Silky Co Dogwood, Stiff or Gray Hawthorn Queen Anne's lace Cucumber, Wild Logwood, Spotted Logwood, Spott	Inus incana nemone canadensis pios americana sclepias syriaca ster lanceolatus romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M MF MF M MF M MF
Anemone, Canada Groundnut, Wild bean Milkweed, Common Aster, Tall white Brome, Smooth Bindweed, Hedge Coontail Ce Thistle, Canada Dogwood, Silky Co Dogwood, Stiff or Gray Hawthorn Queen Anne's lace Cucumber, Wild Logwood, Spotted Logwood, Spott	nemone canadensis pios americana sclepias syriaca ster lanceolatus romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M MF M MF M MF M M M M M M MF MF
Groundnut, Wild bean Milkweed, Common Aster, Tall white Brome, Smooth Bindweed, Hedge Coontail Coontail Thistle, Canada Dogwood, Silky Dogwood, Stiff or Gray Hawthorn Queen Anne's lace Cucumber, Wild Looper Street Looper Stree	pios americana sclepias syriaca ster lanceolatus romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	MF M MF M M M M M M M MF MF
Milkweed, Common Aster, Tall white Brome, Smooth Bindweed, Hedge Coontail Ce Thistle, Canada Dogwood, Silky Co Dogwood, Stiff or Gray Hawthorn Queen Anne's lace Cucumber, Wild Loe-pye-weed, Spotted Aster, Tall white Aster, Tall	sclepias syriaca ster lanceolatus romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M M M MF MF
Aster, Tall white Brome, Smooth Brindweed, Hedge Coontail Ce Thistle, Canada Dogwood, Silky Co Dogwood, Stiff or Gray Hawthorn Cr Queen Anne's lace Cucumber, Wild Loe-pye-weed, Spotted Aster, Tall white Aster Aster Canada Ci	ster lanceolatus romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	MF M M M M MF
Brome, Smooth Bindweed, Hedge Ca Coontail Ce Thistle, Canada Ci Dogwood, Silky Co Dogwood, Stiff or Gray Cr Hawthorn Cr Queen Anne's lace Cucumber, Wild Loe-pye-weed, Spotted Bindweed, Hedge Ca	romus inermis alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M M MF MF
Bindweed, Hedge Coontail Ce Thistle, Canada Ci Dogwood, Silky Co Dogwood, Stiff or Gray Cr Hawthorn Cr Queen Anne's lace Cucumber, Wild Loe-pye-weed, Spotted Caaraa	alystegia sepium eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M M MF MF
Coontail Ce Thistle, Canada Ci Dogwood, Silky Co Dogwood, Stiff or Gray Co Hawthorn Cr Queen Anne's lace Da Cucumber, Wild Ec Joe-pye-weed, Spotted Eu	eratophyllum demersum irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M M MF MF
Thistle, Canada Ci Dogwood, Silky Co Dogwood, Stiff or Gray Co Hawthorn Cr Queen Anne's lace Da Cucumber, Wild Ec Joe-pye-weed, Spotted Eu	irsium arvense ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M MF MF
Dogwood, Silky Dogwood, Stiff or Gray Hawthorn Cr Queen Anne's lace Cucumber, Wild Joe-pye-weed, Spotted Code	ornus amomum ornus foemina rataegus sp. aucus carota chinocystis lobata	M M MF MF
Dogwood, Stiff or Gray Hawthorn Cr Queen Anne's lace Cucumber, Wild Joe-pye-weed, Spotted Code Europe State Code Code	ornus foemina rataegus sp. aucus carota chinocystis lobata	M MF MF
Hawthorn Cr Queen Anne's lace Da Cucumber, Wild Ec Joe-pye-weed, Spotted Eu	rataegus sp. aucus carota chinocystis lobata	MF MF
Queen Anne's laceDaCucumber, WildEcJoe-pye-weed, SpottedEu	aucus carota chinocystis lobata	MF
Cucumber, Wild Ecc Joe-pye-weed, Spotted Eu	chinocystis lobata	
Joe-pye-weed, Spotted Eu		
		M
Ach White Er	upatorium maculatum	M
Asii, Willic IT	axinus americana	M
Ash, Red or Green Fra	axinus pennsylvanica	M
Bedstraw, White Ga	alium mollugo	M
Jewelweed, Spotted Im	npatiens capensis	MF
Butter-and-eggs Lin	inaria vulgaris	M
Honeysuckle, Fly Lo	onicera x bella	M
Water horehound, European Ly	ycopus europaeus	M
	ythrum salicaria	M
Mint, Field Me	lentha arvensis	M
Water-lily, White Ny	ymphaea odorata	
	nalaris arundinacea	
	opulus deltoides	M
	opulus tremuloides	M
	runus pensylvanica	F
	hamnus cathartica	M
·	hus hirta	MF
΄ υ	cirpus atrovirens	
	cirpus tabernaemontani	
	symbrium officinale	
	olanum dulcamara	M
<i>U</i> , ,	olidago canadensis	M
į	onchus arvensis	M
	parganium eurycarpum	
	eachys palustris	
	anacetum vulgare	M
-	halictrum pubescens	M

Basswood	Tilia americana	M
Nettle, Stinging	Urtica dioica	MF
Tapegrass	Vallisneria americana	
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Location ID: IM04

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Alder, Speckled or Tag	Alnus incana	M
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Aster, Tall white	Aster lanceolatus	
Aster, New England	Aster novae-angliae	
Birch, Paper or White	Betula papyrifera	M
Birch, Gray	Betula populifolia	M
Beggar-ticks; Stick-tight	Bidens frondosa	
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Tussock	Carex stricta	
Turtlehead	Chelone glabra	M
Thistle, Canada	Cirsium arvense	M
Thistle, Bull or Common	Cirsium vulgare	M
Dogwood, Silky	Cornus amomum	M
Hawthorn	Crataegus sp.	MF
Queen Anne's lace	Daucus carota	MF
Cucumber, Wild	Echinocystis lobata	M
Spikerush, Creeping	Eleocharis palustris	
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Boneset	Eupatorium perfoliatum	M
Goldenrod, Grass-leaved	Euthamia graminifolia	M
Ash, White	Fraxinus americana	M
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Wild; Blue flag	Iris versicolor	M
Water horehound, European	Lycopus europaeus	M
Bugle-weed, Water horehound	Lycopus uniflorus	M
Loosestrife, Purple	Lythrum salicaria	M
Apple	Malus pumila	MF
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Pickerel-weed	Pontederia cordata	
Wapato; Duck-potato	Sagittaria latifolia	
Willow, tree	Salix sp.	M
Bulrush	Scirpus atrovirens	
Bulrush, River	Scirpus fluviatilis	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Goldenrod, Common	Solidago canadensis	M
Bur-reed, Giant	Sparganium eurycarpum	

Tansy	Tanacetum vulgare	M
Basswood	Tilia americana	M
Clover, Red	Trifolium pratense	MF
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Maple, Silver	Acer saccharinum	
Redtop; Black bent	Agrostis gigantea	
Alder, Speckled or Tag	Alnus incana	M
Hog peanut	Amphicarpaea bracteata	MF
Bluestem, Big	Andropogon gerardii	
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Milkweed, Common	Asclepias syriaca	M
Aster, New England	Aster novae-angliae	
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Lake	Carex lacustris	
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Canada	Cirsium arvense	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Queen Anne's lace	Daucus carota	MF
Cucumber, Wild	Echinocystis lobata	M
Wild-rye, Virginia	Elymus virginicus	
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
St. John's-wort	Hypericum perforatum	M
Jewelweed, Spotted	Impatiens capensis	MF
Butternut	Juglans cinerea	MF
Vetchling	Lathyrus palustris	M
Loosestrife, Purple	Lythrum salicaria	M
Mint, Field	Mentha arvensis	M
Bergamot, Wild	Monarda fistulosa	M
Water-lily, White	Nymphaea odorata	
Evening-primrose	Oenothera parviflora	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Pine, White	Pinus strobus	MF
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Raspberry, Red	Rubus idaeus	MF
Black-eyed-Susan	Rudbeckia hirta	M
Pussy-willow	Salix discolor	M

Willow, tree	Salix sp.	M
Skullcap, Mad-dog	Scutellaria lateriflora	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Tansy	Tanacetum vulgare	M
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Tapegrass	Vallisneria americana	
Mullein	Verbascum thapsus	M
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	
Maple, Silver	Acer saccharinum	
Alder, Speckled or Tag	Alnus incana	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Aster; Calico	Aster lateriflorus	M
Bindweed, Hedge	Calystegia sepium	MF
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Strawberry, Wild	Fragaria virginiana	MF
Bedstraw, White	Galium mollugo	M
Avens, White	Geum canadense	M
Water horehound, European	Lycopus europaeus	M
Fern, Sensitive	Onoclea sensibilis	M
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Buckthorn, Common	Rhamnus cathartica	M
Willow	Salix sp.	M
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Basswood	Tilia americana	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Vetch, Cow	Vicia cracca	
Violet	Viola sp.	MF
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Beggar-ticks; Stick-tight	Bidens frondosa	
Bindweed, Hedge	Calystegia sepium	MF
Sedge, Tussock	Carex stricta	
Water-hemlock	Cicuta maculata	M
Thistle, Canada	Cirsium arvense	M
Dogwood, Silky	Cornus amomum	M
Cucumber, Wild	Echinocystis lobata	M
Pilewort, Fireweed	Erechtites hieracifolia	
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Bedstraw, White	Galium mollugo	M
Jewelweed, Spotted	Impatiens capensis	MF
Butternut	Juglans cinerea	MF
Walnut, Black	Juglans nigra	MF
Loosestrife, Purple	Lythrum salicaria	M
Fern, Sensitive	Onoclea sensibilis	M
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Pine, White	Pinus strobus	MF
Smartweed, Water	Polygonum amphibium	
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Pussy-willow	Salix discolor	M
Bulrush, River	Scirpus fluviatilis	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Mustard, Hedge	Sisymbrium officinale	
Nightshade, Deadly	Solanum dulcamara	M
Goldenrod, Common	Solidago canadensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Basswood	Tilia americana	M
Elm, American	Ulmus americana	M
Nettle, Stinging	Urtica dioica	MF
Grape, Frost or Riverbank	Vitis riparia	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M=Medicine)
Box-elder	Acer negundo	(= = = = = = = = = = = = = = = = = = =
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Burdock, Common	Arctium minus	MF
Jack-in-the-pulpit	Arisaema triphyllum	M
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Aster; Calico	Aster lateriflorus	M
Fern, Lady	Athyrium filix-femina	M
Birch, Paper or White	Betula papyrifera	M
False-nettle	Boehmeria cylindrica	
Bindweed, Hedge	Calystegia sepium	MF
Sedge	Carex trichocarpa	1122
Buttonbush	Cephalanthus occidentalis	M
Enchanter's nightshade	Circaea lutetiana	M
Thistle, Canada	Cirsium arvense	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Stiff or Gray	Cornus foemina	M
Dogwood, Round-leaved	Cornus rugosa	M
Fern, Fancy	Dryopteris intermedia	111
Waterweed; Elodea	Elodea canadensis	
Horsetail, Field	Equisetum arvense	M
Fleabane, Daisy	Erigeron annuus	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Ash, White	Fraxinus americana	M
Cranesbill, Purple	Geranium maculatum	171
Jewelweed, Spotted	Impatiens capensis	MF
Elecampane	Inula helenium	M
Butternut	Juglans cinerea	MF
Honeysuckle, Fly	Lonicera x bella	M
Water horehound, European	Lycopus europaeus	M
Loosestrife, Purple	Lythrum salicaria	M
Solomon's seal, False	Maianthemum racemosum	M
Fern, Ostrich	Matteuccia struthiopteris	F
Naiad	Najas flexilis	-
Fern, Sensitive	Onoclea sensibilis	M
Parsnip, Wild	Pastinaca sativa	-
Canary-grass, Reed	Phalaris arundinacea	
Smartweed, Water	Polygonum amphibium	
Pondweed	Potamogeton sp.	

Oak, Mossy-cup; Bur oak	Quercus macrocarpa	M
Buckthorn, Common	Rhamnus cathartica	M
Sumac, Staghorn	Rhus hirta	MF
Currant, Wild black	Ribes americanum	
Raspberry, Red	Rubus idaeus	MF
Raspberry, Black	Rubus occidentalis	MF
Wapato; Duck-potato	Sagittaria latifolia	
Bulrush, River	Scirpus fluviatilis	
Skullcap, Mad-dog	Scutellaria lateriflora	M
Live-forever	Sedum telephium	
Goldenrod, Common	Solidago canadensis	M
Sow-thistle	Sonchus arvensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Germander, Wild.Wood-sage	Teucrium canadense	M
Meadow-rue, Tall	Thalictrum pubescens	M
Basswood	Tilia americana	M
Poison ivy	Toxicodendron radicans	M
Coltsfoot	Tussilago farfara	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Nettle, Stinging	Urtica dioica	MF
Tapegrass	Vallisneria americana	
Nannyberry	Viburnum lentago	MF

Common Name	Scientific Name	Cultural Use Indicator (F=Food, M-Medicine)
Alder, Speckled or Tag	Alnus incana	M
Anemone, Canada	Anemone canadensis	M
Angelica, Purple-stemmed	Angelica atropurpurea	MF
Groundnut, Wild bean	Apios americana	MF
Milkweed, Common	Asclepias syriaca	M
Aster, Tall white	Aster lanceolatus	
Bindweed, Hedge	Calystegia sepium	MF
Bellflower, Marsh	Campanula aparinoides	
Sedge, Lake	Carex lacustris	
Coontail	Ceratophyllum demersum	
Water-hemlock, Bulb-bearing	Cicuta bulbifera	M
Dogwood, Silky	Cornus amomum	M
Dogwood, Red osier	Cornus sericea	M
Spikerush, Creeping	Eleocharis palustris	
Waterweed; Elodea	Elodea canadensis	
Horsetail, Field	Equisetum arvense	M
Joe-pye-weed, Spotted	Eupatorium maculatum	M
Ash, White	Fraxinus americana	M
Frog's-bit	Hydrocharis morsus-ranae	
Jewelweed, Spotted	Impatiens capensis	MF
Iris, Yellow	Iris pseudacorus	M
Water horehound, European	Lycopus europaeus	M
Loosestrife, Purple	Lythrum salicaria	M
Water-lily, White	Nymphaea odorata	
Fern, Sensitive	Onoclea sensibilis	M
Virginia creeper, Woodbine	Parthenocissus vitacea	M
Parsnip, Wild	Pastinaca sativa	
Canary-grass, Reed	Phalaris arundinacea	
Phragmites	Phragmites australis	
Pine, White	Pinus strobus	MF
Pickerel-weed	Pontederia cordata	
Pondweed	Potamogeton epihydrus	
Pondweed, Long-leaved	Potamogeton nodosus	
Pondweed, Red-head	Potamogeton richardsonii	
Buckthorn, Common	Rhamnus cathartica	M
Raspberry, Red	Rubus idaeus	MF
Wapato; Duck-potato	Sagittaria latifolia	
Bulrush, River	Scirpus fluviatilis	
Bulrush, Soft-stem; Tule	Scirpus tabernaemontani	
Parsnip, Water	Sium suave	
Nightshade, Deadly	Solanum dulcamara	M

Goldenrod, Common	Solidago canadensis	M
Bur-reed, Giant	Sparganium eurycarpum	
Germander, Wild.Wood-sage	Teucrium canadense	M
Meadow-rue, Tall	Thalictrum pubescens	M
Cat-tail, Narrow-leaved	Typha angustifolia	MF
Nettle, Stinging	Urtica dioica	MF
Tapegrass	Vallisneria americana	
Vervain, Blue	Verbena hastata	M
Nannyberry	Viburnum lentago	MF
Vetch, Cow	Vicia cracca	
Wild rice	Zizania aquatica	F

APPENDIX 5.

SPECIES IDENTIFIED BY ALCOA (NOW ARCONIC) ON THE LOWER GRASSE RIVER IN HABITAT DELINEATION ASSESSMENT (HDA) STUDIES

Not all species listed may be present within the study area but none were removed from the table (e.g., it is questionable that either *Prunus avium* or *Vitis labrusca* occurs in northern NY). Mohawk names and cultural use details provided by SRMT Environment Division from literature compilation. See Notes at end of Appendix for further details and references used.

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
Aquatic submerged near shore	Submerged	Coontail	Ceratophyllum demersum		 Provides habitat and food for insects, water fowl and aquatic fur bearing animals Good bottom cover that limits sunlight into water
		Waterweed	Elodea canadensis		 Provides habitat for invertebrates Cover for fish and amphibians Water fowl and small water animals eat plant Economically as an aquarium plant
		Water Stargrass	Heteranthera dubia		 Food for invertebrates, fish and other wildlife species Water fowl also consume
		Milfoil	Myriophyllum sp.		 Used as a blood medicine Emetic uses

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Water nymph	Najas flexilis		Fish and small water animals food source
		Stonewort	Nitella sp. ¹		 Habitat and food source for water mammals and insects
		Small pondweed	Potamogeton pusillus		Aquatic mammals food source
		Richardson's pondweed	Potamogeton richardsonii		• NF
		Grass leaved pondweed	Potamogeton gramineus		Aquatic mammals food source
	Floating	Wild celery	Vallisneria americana		Foods sourceFish nurseryNatural water filter
		Frogbit	Limnobium laevigatum ²		Natural cover for small animals and water fowl
	Emergent	White water lily	Nymphaea odorata	Iakonatónkion onennorokó:wa	Considered a very powerful plant and uses concealed
		Sweetflag	Acorus calamus	Onennó:ron Ononnó:ron	 Coughs and colds Worms Blood remedy Boils, earaches, toothaches, sore throats analgesic
		Flowering rush	Butomus umbellatus		veterinary aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Sedges	Carex sp.		 Erosion control Considered threatened Caterpillars and butterfly nesting and food Food – seeds for ducks, sparrows and other game birds Likes to be grouped with other species such as purple aster, wild iris, swamp milkweed, Joe Pye weed, common
		Lake sedge ³	Carex stricta		• NF
		Spike rush	Eleocharis sp.	Kaniakonros	• Bulbs used for food
		Iris	Iris sp.		 Decoction used for hay fever blood medicine poultice Helps infertility

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Soft rush			 Cover for water fowl Insect food Stems used for baskets, mats, ropes Medicinal properties – diuretic, febrifuge, sedative, anti-inflammatory Topically used as a poultice for skin inflammations Used as a tea for insomnia and anxiety
		Purple loosestrife	Lythrum salicaria		• Febrifuge - Used for fever as a compound decoction
		Reed Canary Grass	Phalaris arundinacea		• NF
		Common reed	Phragmites australis		• Used to soak corn seeds before planting
		Pickerelweed	Pontederia cordata		 Seeds, leaf stalk used as food for small water fowl as well as deer Nectar attracts bees and butterflies Roots, emollient and astringent, sometimes used as a contraceptive

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Arum-leaved arrowhead	Sagittaria cuneata		 Poultice of leaves used to stop milk production Tea from roots used for digestion Poultice of roots used in treatment of wounds and sores
		Common arrowhead	Sagittaria latifolia		• Rheumatism, skin irritations i.e. boils, laxative,
		Stiff arrowhead	Sagittaria rigida		 Considered rare Used as food (walnut sized tubers) for humans – raw, boiled, dried, baked, mashed & water fowl Used for indigestion, reduce fevers, rheumatism, poultice for sores, garden fertilizer
		Softstem bulrush	Schoenoplectus tabernaemontani		Snakebite remedy
		Common three square	Scirpus americanus ⁴		 Erosion control – dense root base Wildlife food and cover Small water mammals food source
		River bulrush	Scirpus fluviatilis		Basket making
		Common burreed	Sparganium eurycarpum		Febrifuge – used for chillsVeterinary aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Narrowleaf cattail	Typha angustifolia	Onó:ta	Antiseptic washOrthopedic aid
		Wild rice	Zizania sp.	Onatsiakenh:ra ón:we	• Food source, humans and water mammals and bird
	Attached algae	Filamentous algae	Cladophora sp. ⁵		• NF
Wetland	Woody vine	Japanese honeysuckle	Lonicera japonica		Considered invasive speciesHas known medicinal properties in Europe
		Virginia creeper	Parthenocissus quinquefolia	Tsionahareskó:wa	 Decoction made to counteract poison sumac Twigs used Swollen joints Difficult urination Considered quite poisonous
		Poison Ivy	Toxicodendron radicans	Iakohontarastha, iakohon:taras, karontahnon:ni	• Rubbed on skin affected by reaction to poison ivy
		Fox grape	Vitus labrusca		• Used for anemia as well as veterinary aid - horse births
		River Bank Grape	Vitis riparia	Kontatewennio ohnenhare	• Food source
	Herbaceous	Box Elder	Acer negundo	tsikaiowistokéha	 Used in food preparations parasites
		Red maple	Acer rubrum	wáhta	 Blood medicine Used for hives Eye medicine Female menstrual cramps

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Canada anemone	Anemone canadensis	kaniakenére	Anti-parasitic medicine
		Purplestem angelica	Angelica atropurpurea	Ohnahsén:ra* O'nahsén:ra*	 Headaches – steam root Plant used externally for rheumatism Roots blood purifier Decoction of roots for colds Root used fevers and chills Orthopedic aid applied to broken bones Frostbite and exposure Pulmonary aid – pneumonia
		Ground nut	Apios americana		• Unspecified, tubers eaten
		Lesser burdock	Articum minus	Ohrhohte'kó:wa	 Blood purifier Roots used for rheumatism Leaves used for headaches and induce sweating Used for skin eruptions – pimples Diaphoretic – draw out poison Kidney problems Bruises and backaches

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common milkweed	Asclepias syriaca	Kanon'tinekenhs, tsikene'tshe'wén:ta, Tarontará:ken	 Wash for sore muscles Poultice applied to legs for strength Sap used for warts, skin growths Flower - food
		Devil's Pitchfork	Bidens frondosa		• NF
		Smallspike false nettle	Boehmeria cylindrica		• Attracts butterflies • NF
		Hedge false bindweed	Calystegia sepium		 Roots and leaves food sources Roots – increase flow of bile
		Shallow sedge	Carex lurida		• Small water animal and fowl food source
		Common fox sedge	Carex vulpinoidea		Fighting medicine
		Common chicory	Cichorium intybus		Blood cleanser
		Canadian thistle	Cirsium arvense	Óhrhohte, Ohnión:wara	• Oral aide for mouth ailments
		Bull thistle	Cirsium vulgare		Cancer treatment Hemorrhoids
		Crown Vetch	Coronilla varia		 Erosion control Used as heart tonic, prostrate problems
		Dodder	Cuscuta		May be northeastern wild mistletoe which does have medicinal uses

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Queen Anne's lace	Daucus carota	Wanonhsanónhne, kontatewenní:io otsíhkwa Skawirowánen otihonte	 Blood medicine Used against pimples Used to help urination Helps womb
		False strawberry	Duchesnea indica ⁶		Blood remedySnake bite remedyHelps hair loss
		Virginia wild rye	Elymus virginicus		 Planting aid for corn Roots used for kidneys Used in compound decoction for stricture (narrowing of an opening)
		Field horsetail	Equisetum arvense	Onén:ta óhonte, akohsá:ten raotáhsa	 Used for headaches Kidneys Rheumatism, achy joints Teething
		Prairie Fleabane	Erigeron strigosus	Teiokekárien	 Ancient plant Kidney, bladder troubles Silica – helps to fix calcium in body Headaches and pain

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common boneset	Eupatorium perfoliatum	Teionerahtaoéstha, tsi Kanaratá:kon Teionerahta ò we ientston	 Analgesic Has many uses, cold remedy, dermatological aid, febrifuge, gastrointestinal aid, hemorrhoid remedy, kidney aid, laxative, orthopedic aid, pulmonary aid Poultice and tea used for broken bones
		Flattop goldenrod	Euthamia graminifolia		 Stomach problems, headaches, cold remedy Febrifuge, gastrointestinal aid, pulmonary aid, laxative, kidney aid, veterinary aid
		Spotted Joe Pye weed	Eutrochium maculatum		• Good for kidneys, afterbirth, chills and fevers
		Sticky willy	Galium aparine		• Used as a wash for poison ivy and other skin itches
		Groundivy	Glechoma hereracea		• NF

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Spotted Jewelweed	Impatiens capensis	Kahne:ki, tkahne:ka	 Dermatological aid Wash for liver spots Diuretic, roots used Used as eye wash – stems Febrifuge – induce sweating to break fever Kidney aid Liver aid Used for difficult urination
		Lamp rush	Juncus effusus		Runners medicine
		Canadian Blue Lettuce	Lactuca canadensis		• Used as a poultice for piles
		Rice cut grass	Leersia oryzoides		• Food for small water animals and birds
		Japanese honeysuckle	Lonicera japonica		 Considered invasive species Has known medicinal properties in Europe
		Tartarian honeysuckle	Lonicera tartarica		• Food source for birds and small mammals
		Cutleaf waterhorehound	Lycopus americanus		PoisonousDid have some uses but much caution used
		Purple loosestrife	Lythrum salicaria		• Febrifuge – fever reducer

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Feathery false Solomon's seal	Maianthemum racemosum	Kit Kit aoéhta	 Tincture taken for tapeworms Antidote for certain poisons Foot soak Rheumatism Blood medicine compound Poultice used for swellings Used after a miscarriage Hunting medicine Snakebite remedy
		Black medick	Medicago lupulina		• Used as a laxative
		Yellow sweet- clover	Melilotus officinalis		 Skin irritations, pimples Sunburn febrifuge
		King's cureall	Oenothera biennis		 skin – boils Hemorrhoid remedy Increase athletic stamina Woman medicine
		Sensitive fern	Onoclea sensibilis	Kahtehrahón:tsi, ionneráhtens	 Arthritis Blood medicine – anemia Hair wash counter hair loss Poultice for cuts Gastrointestinal aid gynecological aid Woman's medicine, menses, childbirth TB remedy

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Cinnamon fern	Osmundastrum cinnamomeum	iothehrisére	 Analgesic decoction Febrifuge Snakebite remedy Spring tonic Cold remedy Rheumatism Gynecological aid Orthopedic aid Panacea Venereal aid Veterinary aid
		New York fern	Thelypteris noveboracensis		Gynecological aid
		Wild parsnip	Pastinaca sativa		• Men's gynecological support
		Reed Canary Grass	Phalaris arundinacea		• NF
		Common reed	Phragmites australis		• NF
		Kentucky blue grass	Poa pratensis		• NF
		Yard knotweed	Polygonum aviculare	Karón:ton	Antidiarrheal, dermatological aid, orthopedic and pediatric aid
		American tearthumb	Polygonum sagittatum		 NF But is a sister plant with knotweed which does have documented medicinal uses

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
	•	Pickerelweed	Pontederia cordata		 Seeds, leaf stalk used as food for small water fowl as well as deer Nectar attracts bees and butterflies Roots sometimes used as a contraceptive
		Sweet cherry	Prunus avium	Eri'kó:wa	 Heart medicine Bark – coughs and colds Burns fevers, soreness, lung ailments
		Common buckthorn	Rhamnus cathartica		 Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
		Staghorn sumac	Rhus typhina (Rhus hirta)	Tará:kwi	 General pregnancy and birth medicine: Helped lactating mothers, , afterbirth remedy, irregular menses Berries and bark used
		Black raspberry	Rubus occidentalis	Teioterahá:kton	 Antidiarrheal, liver aid, whooping cough remedy Emetic, cathartic, pulmonary aid
		Black eyed Susan	Rudbeckia hirta	Teion:tate	• Anthelmintic (worms), heart medicine, pediatric aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Duck potato	Saggitaria latifolia		Antirheumatic, dermatological aid, laxative, pediatric aid
		Crownvetch	Securigera varia		•
		Tall goldenrod	Solidago altissima	Otsínekwar	• Used to staunch bleeding, emetic, liver aid, gastrointestinal aid, pediatric aid, sedative compound
		Late goldenrod	Solidago gigantea		Kidney, liver and bladder supportWhole plant and root used
		Common bur- reed	Sparganium eurycarpum		Water fowl and mammal foodFebrifuge, veterinary aid,
		New England American aster	Symphyotrichum novae-angliae	Teionerahta'ioenston (leaves curl on the side)**	• Used as fever and cold remedy
		New Belgium American aster	Symphyotrichum novi-belgii		• Fever remedy
		Common tansy	Tanacetum vulgare		• Analgesic, colds, skin aid i.e. cuts and bruises, liver aid, orthopedic aid
		Common dandelion	Taraxacum officinale	Tekaronhiaká:nere, Iotisnó:re	• Pain support, blood and liver medicine, skin aid (liver spots), eye medicine, emetic, kidney aid, laxative, pulmonary aid
		King-of-the- meadow	Thalictrum pubescens		Hemostat infusion used, liver aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Poison ivy	Toxicodendron radicans	Iakohontarástha, iakohónteras, karontahnón:ni	• Used as a rub to counter poison ivy irritations
		Alsike clover	Trifolium hybridum		• Lactation aid for nursing mothers and veterinary aid
		Cattail	Typha sp.	Ono:ta, ohshakentha	food sourcetreatment for burns, sores and diarrhea in children
		American elm	Ulmus americana	Oká:ratsi	• antidiarrheal, antihemorrhagic, gastrointestinal support, hemorrhoid aid, gynecological support, orthopedic aid
		Maple leaf arrow wood	Viburnum acerifolium		 analgesic, emetic, gastrointestinal support, urinary aid for men
	Sapling/Shrub	Box elder	Acer negundo		 Used in food preparations parasites
		Speckled alder	Alnus incana	Teion'neratáhten	• antihemorrhagic, cathartic, emetic, urinary aid, venereal aid
		Bitternut hickory	Carya cordiformis	Ontsikaweh, Iohso' kwatskàrat on'tsíken	• dermatological aid, food, used for furniture making, insect repellent
		Silky dogwood	Cornus amomum		• analgesic, dermatological aid, laxative, emetic, pediatric aid, poultice, pulmonary aid, sedative, urinary aid, venereal aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Gray dogwood	Cornus racemose		• dermatological aid, gastrointestinal aid, orthopedic aid, venereal aid, veterinary aid
		Green ash	Fraxinus pennsylvanica	kanerohon	• cambian layer used but purpose not specified
		Tartarian honeysuckle	Lonicera tatarica		• Food source for birds and small mammals
		Eastern cottonwood	Populous deltoids	Onerahtonta, tsio'skiohiiowane	• NF
		Sweet cherry	Prunus avium	Eri'kó:wa	• NF
		Black cherry	Prunus serotina	Ori'kowa	• Used for colds and coughs, analgesic, blood medicine, burns, dermatological aid, emetic, respiratory aid, febrifuge,
		Choke cherry	Prunus virginiana	Teiakonia'tawén:'eks	• Antidiarrheal, antihemorrhagic, blood medicine, cough medicine, dermatological aid, gynecological aid, pediatric aid, TB remedy, veterinary aid
		White oak	Quercus alba	Otokénha	Psychological aid, TB remedy, veterinary aid
		Red Oak	Quercus rubra	Karíhton	• Diarrhea aid, indigestion, asthma, coughs, hoarseness, fevers, wash for skin inflammation, mouth sores,

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common buckthorn	Rhamnus cathartica		• Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
		Staghorn sumac	Rhus typhina	Tará:kwi	 General pregnancy and birth medicine: Helped lactating mothers, , afterbirth remedy, irregular menses Berries and bark used
		Black raspberry	Rubus occidentalis	Teioterahakton	 Antidiarrheal, emetic, liver aid, cathartic, pediatric aid, pulmonary aid, venereal aid
		Black willow	Salix nigra	ò:se kakwirahóntsi	• Carminative compound for stomach gas, cough medicine compound, throat aid
		American basswood	Tilia americana	Ohósera	 Antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		American elm	Ulmus americana	Aká:ratsi	• Antidiarrheal, antiemetic, antihemorrhagic, gastrointestinal aid, gynecological aid, hemorrhoid remedy, orthopedic relief
		Maple leaf arrow wood	Viburnum acerifolium		Berries eaten
	Tree	Box elder	Acer negundo		 Used in food preparations parasites
		Shagbark hickory	Carya ovata	Onennóhkara	anthelmintic compound, antirheumatic, dermatological aid
		Flowering dogwood	Cornus florida ⁸		• gastrointestinal aid
		Green ash	Fraxinus pennsylvanica		• cambian layer used but purpose not specified
		Eastern white pine	Pinus strobus	Tsionerahtase'kó:wa, Onerahtase'kó:wa	 unspecified used as food immunity booster, colds and coughs, rheumatism used in salves for cuts, blood tonic
		Eastern cottonwood	Populus deltoides	Onerahtonta, tsio'skohiowane	• NF
		sweet cherry	Prunus avium	Ehrihko:wa	 Heart medicine Bark – coughs and colds Burns fevers, soreness, lung ailments
		Red oak	Quercus rubra	Karíhton	Nuts used as foodDermatological aid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common buckthorn	Rhamnus cathartica		Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
	Staghorn sumac	Rhus typhina	Tarάhkwi	 General pregnancy and birth medicine: Helped lactating mothers, , afterbirth remedy, irregular menses Berries and bark used 	
		Black willow	Salix nigra	ó:se kakwirahóntsi	 Carminative – for stomach gas Coughs remedy, mouth and throat abscesses
		American basswood	Tilia americana	Ohóhsera	 Antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure
		American elm	Ulmus americana	Okὰratsi	• Antidiarrheal, antiemetic, antihemorrhagic, gastrointestinal aid, gynecological aid, hemorrhoid remedy, orthopedic relief

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
Shoreline/Riparian	Herbaceous	American Basswood	Tilia americana	Ohóhsera	 antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure
		Bull thistle	Cirsium vulgare	Taro Ohnión:wara	• Cancer treatment, hemorrhoid remedy, hemostat plant
		Canada anemone	Anemone canadensis		Anti-parasitic medicine
		Canada thistle	Cirsium arvense		• Oral aide for mouth ailments
		Cinnamon fern	Osmundastrum cinnamomeum	iothehrisere	Analgesic, antirheumatic, cold remedy, gynecological aid, orthopedic aid, panacea, venereal aid cold compound, veterinary aid
		Common buckthorn	Rhamnus cathartica	tsikenenstanenhte	Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
		Common reed	Phragmites australis		Used to soak corn seeds before planting
		Fox grape	Vitis labrusca	Kontatewenní:io o'nénhare	• Used for anemia as well as veterinary aid - horse births

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Goldenrod sp.	Solidago sp.		• Analgesic, emetic, gastrointestinal aid, liver aid, pediatric aid, sedative aid
		Green ash	Fraxinus pennsylvanica	kanerohon	 cambian layer used but purpose not specified
		Ground nut	Apios americana	Ohnenna'ta'ón:we	• unspecified food source
		Horsetail	Equisetum sp.	Ohonte onen:ta	Kidney medicine
		Kentucky blue grass	Poa pratensis		• NF
		Late goldenrod	Solidago gigantea		• NF
		Grasses (lawn)	Poa sp.	Ohonteshon:'a	• NF
		Maple-leaf viburnum	Viburnum acerifolium		• Analgesic, , gynecological aid, urinary aid
		Meadow rue	Thalictrum sp.		• Sciatic pain relief
		Cattail sp.	Typha angustifolia	Ohsa'kén:ta Onó:ta	• Used for sprains, veterinary aid, women's breast aid and febrifuge
		New England American aster	Symphyotrichum novae-angliae		• Used for fevers
		Poison ivy	Toxicodendron radicans		• Used to counter outbreaks of poison ivy rashes
		Purple loosestrife	Lythrum salicaria		• Febrifuge - Used for fever as a compound decoction
		Queen Anne's lace	Daucus carota	Wanonhsanonhne, lontatewennio otsihkwa watatewehniio	Blood medicineUsed against pimplesUsed to help urinationHelps womb

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Reed canary grass	Phalaris arundinacea		• NF
		Rye	Secale cereale		• Food source
		Sensitive fern	Onoclea sensibilis	Kahtehrahón:tsi, ionnera:tens	Women's nursing medicine, birth pain remedy, blood tonic
		Small white aster	Symphyotrichum sp.		• Used in sweats and to revive unconscious person
		Sneezeweed	Helenium autumnale		 Strong properties Used to treat intestinal worms, laxative and alterative, used with caution
		Spotted joe-Pyeweed	Eutrochium maculatum		• Good for kidneys, afterbirth, chills and fevers
		Stinging nettle	Urtica dioica	Iakohehseráhstha, teion'takoronte	Food source, fibre used to make rope, used for rheumatism/pain relief
		Tall goldenrod	Solidago altissima		• Liver and sunstroke remedy
		Common tansy	Tanacetum vulgare		• Used to counter too much gall in body, headaches, brises cutes, bone decay
		Tartarian honeysuckle	Lonicera tatarica		• Food source for birds and small mammals
		Virginia creeper	Parthenocissus quinquefolia		 Used as antidote for poison sumac, orthopedic aid, urinary aid Considered poisonous by some

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Wild strawberry	Fragaria vesca/virginiana	Kontatewennio ken'niiohontésha	Spring blood tonic medicineFood and ceremonial practices
		Wineberry	Rubus phoenicolasius		• Anti-inflammatory, kidney
	Understory	American Basswood	Tilia americana	Ohóhsera	 Antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure
		American elm	Ulmus americana	Okàratsi	• Antidiarrheal, antiemetic, antihemorrhagic, gastrointestinal aid, gynecological aid, hemorrhoid remedy, orthopedic relief
		Black cherry	Prunus serotina		 Used for colds and coughs, analgesic, blood medicine, burns, dermatological aid, emetic, respiratory aid, febrifuge,
		black walnut	Juglans nigra	Tsiohsòkwak	 Analgesic, blood medicine compound, dermatological aid, laxative, psychological aid compound, parasites
		Box elder	Acer negundo		Used in food preparationsparasites

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common buckthorn	Rhamnus cathartica		Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
		Crab apple	Malus. Sp.	Sewahiiowane'onwe	• Eye medicine, food
		Eastern cottonwood	Populous deltoids	Onerahtonta, tsio'skiohiowane	• Mouth sores
		Flowering dogwood	Cornus florida ⁸		Blood medicine
		Gray dogwood	Cornus racemose		• Dermatological aid, gastrointestinal aid compound, orthopedic aid, venereal aid, veterinary aid, antidiarrheal infusions, oral aid, pediatric aid, stimulant, TB remedy
		Green ash	Fraxinus pennsylvanica		• cambian layer used but purpose not specified
		Privet	Ligustrum sp.		• Immunity booster, very bitter which makes it hard to take, liver diseases
		Pussy willow	Salix discolor	Tako:s ohsi:ta	• Emetic, hemorrhoid remedy, psychological aid, TB remedy
		River birch	Betula nigra		• Colds and coughs aid, food, urinary tract
		River bank grape	Vitis riparia		• food

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Silky dogwood	Cornus amomum		 analgesic, dermatological aid, laxative, emetic, pediatric aid, poultice, pulmonary aid, sedative, urinary aid, venereal aid
		Speckled alder	Alnus incana	Teion'neratahten	 antihemorrhagic, cathartic, emetic, urinary aid, venereal aid
		Staghorn sumac	Rhus typhina	Tará:kwi	 General pregnancy and birth medicine: Helped lactating mothers,, afterbirth remedy, irregular menses Berries and bark used
		Tartarian honeysuckle	Lonicera tartarica		• Food source for birds and small mammals
		Wineberry	Rubus phoenicolasius ⁹		Anti-inflammatory, kidney
	Canopy	American basswood	Tilia americana	Ohohsera	 Antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure
		American elm	Ulmus americana		• Antidiarrheal, antiemetic, antihemorrhagic, gastrointestinal aid, gynecological aid, hemorrhoid

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Black walnut	Juglans nigra		Analgesic, blood medicine compound, dermatological aid, laxative, psychological aid compound, parasites
		Black willow	Salix nigra		 Carminative – for stomach gas Coughs remedy, mouth and throat abscesses
		Box elder	Acer negundo		 Used in food preparations parasites
		Eastern cottonwood	Populous deltoides		• Mouth sores
		Eastern white pine	Pinus strobus		 unspecified used as food immunity booster, colds and coughs, rheumatism used in salves for cuts, blood tonic
		Fir sp.	Abies sp.	Ohtsohkó:ton, otso'ko:ton	Pain compound
		Green ash	Fraxinus pennsylvanica		• cambian layer used but purpose not specified
		Paper birch	Betula papyrifera	Watenaketará:as	• gynecological aid in birthing
		Red oak	Acer rubrum		Nuts used as foodDermatological aid,
		River birch	Betula nigra		Colds and coughs aid, food, urinary tract
		Weeping willow	Salix babylonica	Ose'kó:wa	• Smallpox remedy, menses regulator

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
	Trees > 5"dbh	American basswood	Tilia americana	Ohósera	 Antihemorrhagic Also used for burns, diuretic, emetic, gynecological aid. Orthopedic aid, stimulant, tuberculosis remedy, universal cure
		American elm	Ulmus americana		Antidiarrheal, antiemetic, antihemorrhagic, gastrointestinal aid, gynecological aid, hemorrhoid
		Bitternut hickory	Carya cordiformis		Oil from seed used for rheumatism, bark is a diuretic and laxative
		Black cherry	Prunus serotina		 Dry, irritable coughs. Treats asthma and whooping cough Ease indigestion and symptoms of IBS Sore throats, sores, burns, wounds, and conjunctivitis.
		Black walnut	Juglans nigra	Okiewá:tha	Analgesic, blood medicine compound, dermatological aid, laxative, psychological aid compound, parasites

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Black willow	Salix nigra		 Carminative – for stomach gas Coughs remedy, mouth and throat abscesses
		Blue spruce	Picea pungens	O'só:ra onén:ta	NFPS: spruces native to this area are black , red and white
		Box elder	Acer negundo		 Used in food preparations parasites
		Common buckthorn	Rhamnus cathartica		Blood medicine, , eye wash, remedy for poison, wash for bad backs, sedative qualities
		Eastern cottonwood	Populous deltoids		 Mouth sores Made into twine and used in basket making and dyes
		Eastern white pine	Pinus strobus	tsionerahtasekóiwa	unspecified used as foodcoughs and colds
		Fir sp.	Abies sp.		 Dermatological aid Antirheumatic for internal and externa use, cancer treatment, cold remedy compound, cough medicine, TB remedy
		Green ash	Fraxinus pennsylvanica		• cambian layer used but purpose not specified

Habitat and Venation Type	Vegetation Type	Common Name	Scientific Name	Mohawk Name Available	Cultural Uses and Details
		Common Hawthorn	Crataegus monogyna ¹⁰	Onión:wara	• heart medicine, angina remedy, relieves high blood pressure, improves circulation
		Norway maple	Acer platanoides		• non-native species
		Paper birch	Betula papyrifera		• gynecological aid
		Red maple	Acer rubrum		blood and eye medicinedermatological aid, hunting medicine
		Red oak	Quercus rubra		• acorns used food, dermatological aid
		Shagbark hickory	Carya ovata	Onennóhkara	• anthelmintic compound, antirheumatic, dermatological aid
		White oak	Quercus alba		• psychological aid, TB remedy compound, veterinary aid

Notes:

- 1. An alga.
- 2. Likely *Hydrocharis morsus-ranae*. *Limnobium* is a more southern invasive.
- 3. Common name should be Tussock sedge, Lake sedge is *C. lacustris*.
- 4. Likely Schoenoplectus pungens. S. americanus is a tidal species and northern NY records are erroneous.
- 5. An alga.
- 6. Perhaps Fragaria vesca? Duchesnea is a species occasionally escaped in southern NY.
- 7. Accepted name in NY is Coronilla varia.
- 8. Perhaps *C. alternifolia*. *C. florida* is not known to occur in the county.
- 9. Likely R. odoratus. R. phoenicolasius is not known to occur in northern NY.
- 10. Likely not C. monogyna, which is only known as an occasional escape in northern NY. Crataegus sp. is acceptable.

All cultural uses were derived from the following publications and researched by Angie Barnes, Akwesasne Cultural Restoration Program, (ACRP), Medicine and Healing, SRMT Environment Division, 2017.

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