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ISKATEWIZAAGEGAN (SHOAL LAKE) PLANT KNOWLEDGE: AN ANISHINAABE (OJIBWAY) ETHNOBOTANY OF NORTHWESTERN ONTARIO

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ABSTRACT.—We worked with Iskatewizaagegan (Anishinaabe) elders to create a holistic representation of their plant knowledge as well as a more standard ethnobotanical system of classification. In order to understand the holistic approach, chosen by elders to represent their plant knowledge, it was necessary to understand the ontology, epistemology and phenomenology of plant knowledge. This is explored through an examination of the ethnobotanical data, collected in 2000 and 2001, as a system of classification that includes the processes of classification, nomenclature, and identification. In conclusion, we propose that elders emphasize a holistic ethnobotany since they believe plant knowledge resides in the plants of a place and the relationships between persons and plants of that place. This leads to the conclusion that a critical factor in perpetuating knowledge over time, and between generations, is the ongoing creation of relationships through land-based activities.

Key words: Ojibway, Anishinaabe, ethnobotany, worldview, indigenous knowledge.

RESUMEN.—Trabajamos con los adultos de Iskatewizaagegan (Anishinaabe) para obtener una representación holística de su conocimiento sobre plantas, así como su sistema de clasificación. Para comprender el método holístico, con el que los ancianos representan su conocimento sobre plantas, fue necesario comprender la ontología, epistemiología y fenomenología del conocimiento sobre plantas. El análisis de los datos etnobotánicos, tomados en 2000 y 2001, desveló un sistema de conocimiento sobre plantas que incluye los procesos de clasificación, nomenclatura e identificación. Las personas mayores perciben el mundo vivo de manera holística, ya que ellos creen que el conocimiento sobre las plantas de un determinado lugar, reside en las plantas y la relación entre las personas y plantas de ese lugar. Por ello pensamos que para perpetuar este conocimiento en el tiempo, y entre las generaciones, es necesaria la creación de relaciones a través de las actividades diarias basadas en la tierra.

RÉSUMÉ.—En 2000 et 2001, nous avons travaillé avec les aînés iskatewizaagegans (Anishinaabe) pour créer une représentation holistique de leur connaissance des plantes ainsi qu'un système normalisé de classification ethnobotanique reposant sur des principes à la fois classificatoires, nomenclaturaux et d'identification. Outre la forme des plantes, l'écologie et l'utilisation des plantes,

leur connaissance botanique s'appuie également sur des notions ontologiques, épistémologiques et phénoménologiques. Ainsi, leur connaissance est unie à même la plante croissant en un lieu spécifique et elle fait partie inhérente de la relation plante-homme qui s'inscrit dans ce même lieu. Ces relations, rendues dynamiques par des activités extérieures, constituent un élément important dans la transmission de la connaissance des plantes entre les générations.

KNOWING PLANTS

When I[1] started learning about plants from the Anishinaabeg[2] of Iskatewizaagegan my approach consisted of going into the bush, finding a plant with an Ojibway name, recording its uses, and linking that plant to a scientific taxon. During my first field season the community researchers and elders tolerated four months of this listing and knowledge recording exercise. Through this work we were able to generate a list of plant names linked to an associated set of information. The approach, of course, mimicked the way I learned about plants through my formal training and education. I had not really considered that there could be other modes of knowing plants.

Over the course of the winter, my main research associate in the community, Edward Mandamin, suggested that during the second field season we might want to try a different way of knowing plants. He suggested we undertake a set of ceremonies in the spring during which we would tell the elders what we wished to learn about and ask them to guide our learning over the course of the coming summer. Ed and his colleagues, Phyllis Jack and Brennan Wapioke, were most interested in documenting elders' knowledge and acquiring skills for surviving on the land. Iskatewizaagegan elders distinguish the widely shared land-based knowledge of the community from the highly restricted and specialized knowledge of, for example, healers and hunters (See Ellen 2002, who provides a detailed discussion that contrasts generalized and specialized knowledge).

We focused on generalized knowledge for two reasons. First, elders felt this was a body of knowledge that could be part of a research project and taught to an outsider; specialized knowledge is transmitted privately between an elder and a young person. Second, elders were concerned that this knowledge is disappearing, because young people do not experience the land as previous generations did due to the disruption of land-based activities. The approach that emerged to document shared knowledge was first to learn practices associated with land-based activities under the tutelage of elders. This allowed us to become familiar with the plant gifts bestowed upon the Anishinaabeg of Iskatewizaagegan for their survival. Some of the activities that were undertaken during this phase of the research are shown in Figures 1–4. These activities resulted in an approach that provided both written materials and experiential learning modules that could be linked to the curriculum of the IIFN education authority.

Learning plants through the practices utilized by elders for survival on the land was, in my initial thinking, simply a methodological choice. However, through the process of the research and listening to Anishinaabe elders, I also came to learn that it also reflects ontological and epistemological propositions

FIGURE 1.—Ella Dawn Green showing Walter Redsky how she would practice making patterns with bite marks on blue-bead lily (*Clintonia borealis*) leaves. The chosen patterns then would be applied as decoration on birch bark baskets and other items.

regarding how other beings can be known. In many societies in which ethnobotanists work, systems of plant classification are interwoven into practices, institutions, technologies, values, and worldviews (Berkes 1999; Turner et al. 2000). Plant taxa, signified and organized within a system of classification, are not learned as independent entities, but become known through a process of learning guided by elders (Davidson-Hunt and Berkes 2003a).

This paper explores three related puzzles. First, why do our data support Berlin's (1992) suggestion that a basic rank of folk generics exists universally across societies, but not his idea of nontransitive, higher order classes? Second, why do rules of Anishinaabe plant nomenclature allow multiple names for a taxon? Third, why were elders hesitant to assume that every plant encountered in the bush could be assumed to be a part of a taxon on the basis of physical characters or location? Sometimes ethnobiologists conflate the processes of plant classification, nomenclature, and identification (Ghiselin 1999). In our study of Anishinaabe plant knowledge, we have tried to take into account the discrete processes of these different aspects of plant systematics.

Following an introduction to the people and place of Iskatewizaagegan, we discuss plants through an exploration of an Anishinaabe ontology focused on plants. In order to probe the puzzles of classification, nomenclature, and identification we look at the ethnobotanical data collected with Iskatewizaagegan elders, while at the same time bringing the results of other scholars' work into the discussion as a means to help understand our data. This approach allows us to explore the three puzzles posed above and provide our interpretation of an Iskatewizaagegan way of knowing plants.

PEOPLE AND PLACE

Research was undertaken with Anishinaabe (Ojibway, Ojibwa, Saulteaux, Chippewa) people of Iskatewizaagegan No. 39 Independent First Nation (IIFN). IIFN is located in northwestern Ontario approximately 120 km east of Winnipeg, Manitoba. IIFN is one of two First Nations with permanent communities on Shoal Lake, with a combined population of 530 on-reserve band members and some 300 members living off-reserve.

Anishinaabe is an Algonquian language and is one of the largest indigenous language groups in North America. In the written historical record, the presence of Anishinaabeg in the region dates back to the early 1600s (Davidson-Hunt 2003a); they were important participants in the fur trade of the sixteenth to nineteenth centuries. Although a treaty was signed with the Government of Canada in 1873, settler and First Nation governments disagree about its intent. First Nations say that the treaty was a promise to share the land equitably and peacefully between settlers and First Nations, while settler governments say it was simply to allow for subsistence activities until such time as the resources were needed for development. The latter interpretation resulted in the marginalization of First Nation peoples from the dominant economic activities of the twentieth century: mining, forestry, tourism, and commercial and recreational fishing. In spite of these processes over the last hundred years, Iskatewizaagegan people have continued to search for space to maintain their

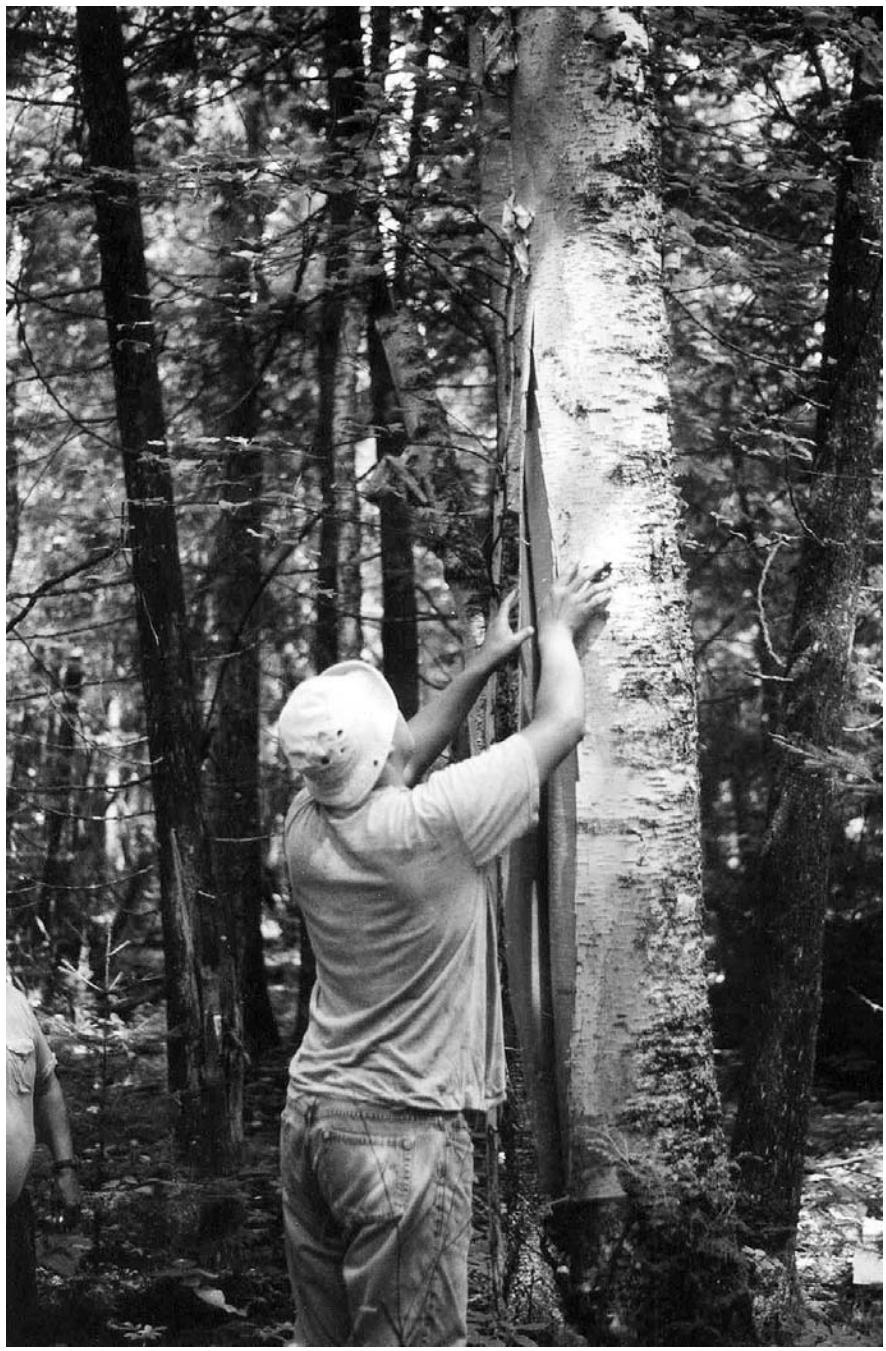

FIGURE 2.—Brennan Wapioke harvesting birch bark (*Betula papyrifera*).

FIGURE 3.—Proper way to harvest cedar (*Thuja occidentalis*) so that the tree will survive.

FIGURE 4.—Ella Dawn Green teaching youth how to make an arched birch dwelling (***waaginogaan***).

relationships to the land and identity through commercial and subsistence activities (Davidson-Hunt and Berkes 2003b).

The Shoal Lake watershed forms part of the Lake of the Woods watershed that is one of the main headwater regions of the Hudson Bay. The natural history of Shoal Lake is notable, as it brings together three great biomes: Prairie, Great Lakes-St. Lawrence Forest, and Boreal Forest (Davidson-Hunt 2003a). This is partly a result of the geology of the region. The thin, acidic soils of the Precambrian Shield give way to the deeper and more basic soils of the Prairie biome as one moves in a southwesterly direction. The region has a mean summer temperature of 15°C and a mean winter temperature of −13°C. Precipitation is evenly distributed throughout the year and is about 600 mm. The intermixing of plant and animal species has produced a region that is higher in biological diversity than any of the three biomes on its own.

METHODOLOGY

The research used a cooperative approach that has been described in Berkes and Davidson-Hunt (2001), Davidson-Hunt (2000), and Davidson-Hunt (2003b). It includes a process of trust building, collaboration in developing research protocols, and review of research results, including a draft of this paper. Although it would be preferable to report that this approach settled potential points of conflict, it is more accurate to report that the process is continuing and trust is built day-to-day with some advances and some setbacks. Community

researchers and translators Brennan Wapioke and Phyllis Jack both played a role in ensuring the success of the research process since 1999.

In order to discuss individual plant taxa and confirm scientific identifications it was necessary to collect voucher specimens during field seasons in 2000 and 2001.[3] If a plant was not abundant or was a rare species, photographs and videos were taken instead of voucher specimens. Digital video was also used to record names, uses, stories, and plant harvesting ethics.[4] When a specimen was collected, or other harvesting activities undertaken, the elders offered prayers and tobacco; additional ceremonies were undertaken as determined by the elders. Three verification workshops have been held with the elders and community researchers to discuss the results of the research.[5] This extended conversation with community researchers and elders improved our understanding of the Iskatewizaagegan ethnobotany that we present in this paper.

A HOLISTIC ISKATEWIZAAGEGAN ETHNOBOTANY

Iskatewizaagegan ontology regarding individual beings begins from the position that the Creator placed all things, including the Anishinaabeg themselves, upon the earth (see also Latour 1993). The living kinds that we call plants are thus part of what Iskatewizaagegan people refer to as ***manidoo ogitigan*** (Creator's garden) as illustrated in Figures 5 and 6. The Creator's garden includes all the human persons, other-than-human persons, and all other things found in the particular place that have been given as a gift to a group of Anishinaabeg. This garden provides Anishinaabe people with all the things that they need to survive and is the substrate of ***anishinaabe izhitwaawin***. This is a term that is difficult to translate but often glossed as 'Anishinaabe ways of life'. However, the concept connotes a constellation of ideas like belonging, intimacy, and connectedness of a person within the wholeness of a place. An Anishinaabe person is embedded within an environment that is both material and spiritual. As other authors have noted, this is a close approximation to the scientific idea of an ecosystem, except that it explicitly includes humans, as well as other-than-humans, from both spiritual and material domains (Berkes et al. 1998; Davidson-Hunt and Berkes 2003b).

In return for this abundance of gifts provided to the Anishinaabeg, the Creator also placed a moral, ''custodial'' responsibility upon the Anishinaabe that Robin Greene has called the principle of ***gimiinigoowizimin gaaganawendang***. This, too, is difficult to translate but an English gloss that communicates this concept is 'keeper of the gifts'. This gloss contains both the idea of the gifts given for the survival of the Anishinaabeg as well as the moral responsibility the people bear to the Creator (see also Lane 2002). The way in which Anishinaabe people know that they are taking care of the Creator's garden is by being aware of the consequences of their actions on others. This requires establishing a relationship with other beings in the garden and being aware that mistreating them can lead to unwelcome incidences, such as an illness or misfortune, in one's own life path.

The Creator's garden provides the sustenance to Anishinaabe ways of life that are placed as the center point in the illustration shown in Figure 5. An Anishinaabe who follows this way of life experiences the world through the

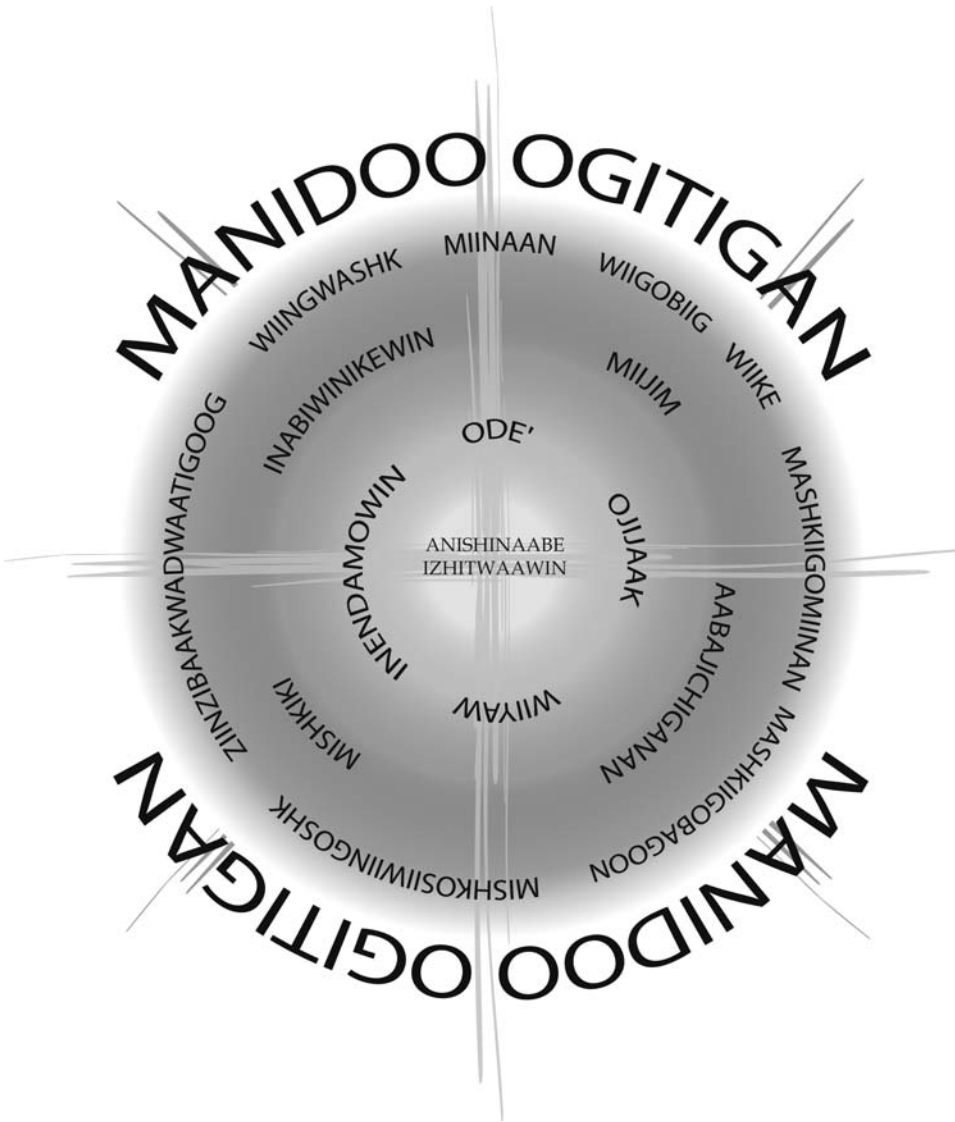

FIGURE 5.—A holistic representation of Iskatewizaagegan ethnobotany created by the research team.

wholeness of her being which includes ***inendamowin***, ***wiiyaw***, ***ojijaak*** and ***ode'*** (mind, body, soul and heart). In turn, the wholeness of her being relates to others of her environment through ***inabiwinikewin***, ***aabajichiganan***, ***miijim***, and ***mishkiki*** (ceremonies, technology, food, and medicine, Figure 5). These are examples of possible interfaces through which an Anishinaabe establishes a relationship with other beings of the Creator's garden; relationships are based upon knowing others through mind, body, soul, and heart.

There is one other important point that can be drawn from Figure 5 that relates to Anishinaabe ontology. An individual being, an inhabitant of the

Creator's garden, can also be thought of in terms of functional properties (material use), but is not defined by those properties. As the elders noted, a blueberry (*Vaccinium* spp.)[6] is categorized as culinary when eaten, technological when used as a dye, medicinal when treating an ailment, and ceremonial when eaten as part of a feast. The taxon is signified by the lexical term 'blueberry' and as a taxon has many potential uses, but each individual blueberry plant is placed by the Creator on this earth to sustain the Anishinaabeg in a way that can only be known at the time of use.

The Anishinaabe ontology of knowing plants sheds some light on the first puzzle we previously identified. One of the major questions of ethnobiology is whether ethnobiological systems of classification are based purely on qualities inherent in the organisms themselves or are influenced to some degree by cultural use (Berlin 1992; Hunn 1982). This is a reasonable concern insofar as it can be assumed that a system of classification can be independent of daily life and that the human mind is an organ independent of its environment (Bateson 1972, 1979). However, Iskatewizaagegan ontology does not permit the brain to become the privileged organ for apprehending the world, nor the mind to be the dominant site of knowledge that subordinates and coordinates other ways of knowing located in the body, soul and heart. Elders insist that plants become known as beings of the Creator's garden who provide for the Anishinaabeg and to whom the Anishinabeg hold a duty. The system of Anishinaabe plant classification, nomenclature, and identification to which we now turn exists within this broader worldview.

AN ISKATEWIZAAGEGAN ETHNOBOTANICAL CLASSIFICATION SYSTEM

Previous Ethnobotanies.—The ethnobotanical literature of Ojibway people has tended to focus upon the names and uses of plants rather than the Ojibway system of plant classification. The best known Ojibway ethnobotany, for example, is that of Frances Densmore, ''Uses of Plants by the Chippewa Indians'' (Densmore 1928). It has since become well-known in a reprinted edition, *How Indians Use Wild Plants for Food, Medicine and Crafts* (Densmore 1974). Other ethnobotanies that likewise focused on the names and uses of plants include Hoffman (1891), Gilmore (1933), Reagan (1928), Smith (1923), and Stowe (1940). These studies were reviewed recently and compiled into a new volume of Ojibway plant names and uses titled *Plants Used by the Great Lake Ojibwa* (Meeker et al. 1993). This body of work has provided a great contribution to our knowledge of Ojibway plants names and uses.

Although the ''classics'' of Anishinaabeg ethnobotany did not examine their systems of plant classification, some relevant work has emerged from the ethnographic and ethnoscientific literature. A. Irving Hallowell, in his work with the ''Berens River Ojibway,'' was the first to consider an Ojibway system of classification of living kinds (Hallowell 1976, 1991). Mary Black drew extensively on Hallowell's work to deepen this discussion and provide an ontological basis for Ojibway ambiguity regarding their classificatory schema (Black 1977a). A recent paper on Ojibway (Lac Seul) ethnobotany provides another recent

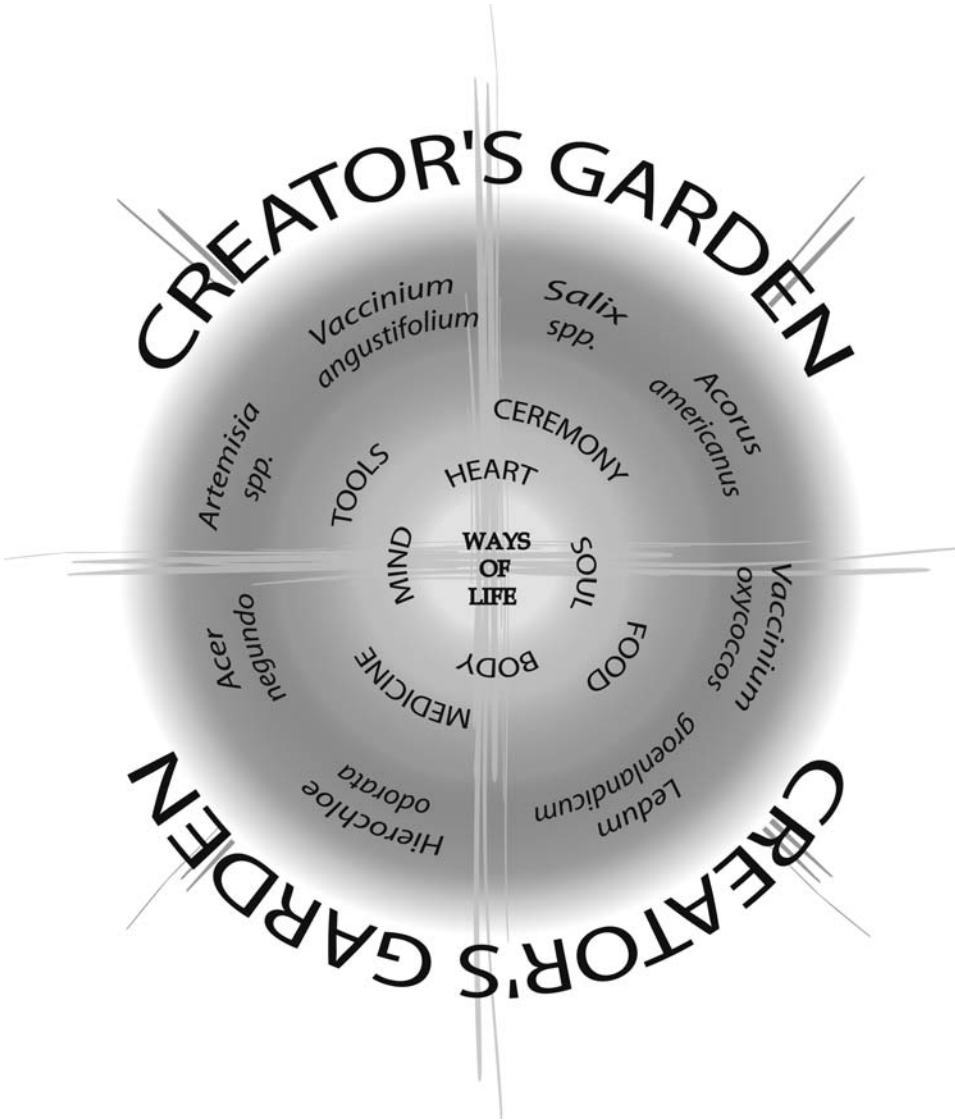

FIGURE 6.—A holistic representation of Iskatewizaagegan ethnobotany created by the research team. English translation.

approach to an Algonquian system of plant classification (Kenny and Parker 2004). We attempt to integrate the thinking of earlier authors into our paper in creating our interpretation of an Iskatewizaagegan ethnobotany. This allows us to pay attention to the ontology and epistemology of knowing plants in our consideration of classification, nomenclature, and identification.

An Iskatewizaagegan System of Plant Classification.—Iskatewizaagegan plant classification is similar to that suggested for other North American indigenous peoples. As Johnson (1999) reports for the Gitxsan (northwestern North

America), the plant classification system is a shallow hierarchy, with higher order plant classes, a basic rank (folk generics) and folk varieties. The idea that a basic rank is the ontological foundation of the classification of living kinds meets with widespread agreement amongst ethnobiologists (Atran 1990; Berlin 1992; Ghiselin 1999). This idea also appears to hold across societies including the universal system of classification that has emerged in the modern period based upon initial efforts of Carl von Linné and other biologists (Atran 1990; Raven et al. 1971). At higher order classes and folk varieties, however, more variation occurs, along with more variation amongst ethnobotanists as to how such classes are created (Ghiselin 1999; Hunn 1976; Taylor 1990).

This has led some ethnobiologists, such as Atran (1990) and Berlin (1992), to insist that higher order ranks, such as intermediate groups, life forms, and kingdoms, should be nontransitive and mutually exclusive. In other words, in a shallow hierarchical system, a taxon should belong to only one higher order class. This follows from the idea that the defining properties of higher order classes should be based on the physical characters of a plant, similar to the Linnaean system. Higher order classes that are created using defining properties other than physical characters, in this approach, should not be considered as part of a society's system of plant classification. However, this assertion has generated opposition from other ethnobiologists such as Turner (1987, 1988, 1989) and Hunn (1976, 1977, 1982), who argue for a greater range of defining properties for higher order class membership.

Classification.—In the ethnobotanical literature, classification, nomenclature, and identification are often presented as one and the same thing. However, as Ghiselin (1999) has noted, these three processes should be considered separately. Classification is ''a creative process whereby the materials are arranged in some kind of order, or system, perhaps providing names for groups of them'' (Ghiselin 1999:451). Nomenclature is the process by which names are provided to the groups but identification is ''the assignment of an individual such as a botanical specimen to a place in a preexisting system, and perhaps to decide that a name applies to it'' (Ghiselin 1999:451).

Ghiselin's work also makes an important contribution by clarifying the nature of groups (taxa) at the basic rank versus higher order groups. At the basic rank, he suggests, groups are not classes (which could have overlapping membership), but wholes composed of organisms or ''individuals at a supraorganismal level'' (Ghiselin 1999:448). This is an important distinction in that diagnostic properties are utilized to decide if a part (an individual plant, for instance) belongs to a whole (for example, a species) for the basic rank. Higher order groups (e.g., foods, medicines) are conceptually distinct, as they are considered to be classes with defining properties of membership. Following this logic, an individual plant can only be a member of one species, or basic rank taxon. However, the same restriction does not hold for groups (taxa) that are considered to be classes. This is similar to Needham's (1975) idea of polythetic classification in that there is no logical reason that a lower order taxon cannot be a member of multiple higher order taxa; there is no logical requirement for such groups to be mutually exclusive, while there is for basic rank groups. We use this

distinction between basic rank and higher order groups to organize our discussion of classification through a consideration of folk generics and major plant groups.

Folk generics. Our research with Anishinaabe elders provides further support for the ethnobotanical concept of a basic rank that we term, following Berlin (1992), folk generics. In Table 1 the Iskatewizaagegan folk generics documented during this research are presented. They exhibit a high degree of correspondence with Linnaean plant taxonomy as well as with the names collected in previous ethnobotanical research.[7]

We present only taxa for which elders recognized a prototypic individual for which they could provide an Anishinaabe name and which we were able to verify with a voucher specimen. There are many other plants that they recognized as useful for medicines but for which they did not provide a name even when asked. Examples of some taxa which they recognized as distinct but for which they do not know an Anishinaabe name are provided in Table 2 and Appendix 1. Such taxa are called covert; a covert taxon is recognized as distinctive—it has been classified, but is not named (Berlin 1992).

Berlin (1992) and Taylor (1990) say that names constructed through the modification of a primary lexeme should be considered as divisions of the basic rank. For example, the primary lexeme ***miin*** refers to blueberries (*Vaccinium* spp.). The terms ***makade-miin*** and ***zhaabwaate-miin*** indicate divisions of the basic rank; they are folk varieties in Berlin's (1992) terminology. Coordinate naming, that is, where the name of one taxon is applied to a different one by borrowing and adding a descriptive secondary lexeme (prefix), follows different rules (see examples in Table 1). ***Waabimanoomin*** 'white ***maanomin***; white rice' and ***mishtadimanoomin*** 'horse ***maanomin***; oats' are taxa at the basic rank that contrast with ***manoomin*** (*Zizania aquatica*). It is interesting, however, that both of these taxa were introduced during the colonial period and one, white rice, cannot be grown in the area, whereas oats are grown as horse feed.

The list of Anishinaabe names presented in Table 1 provides additional support for the idea that a basic rank exists across cultures. The table also presents a current set of basic rank taxa recognized by Iskatewizaagegan elders that can be compared with previous ethnobotanies and recent work by Kenny and Parker for Oji-Cree (Kenny 2000; Kenny and Parker 2004).

Major plant groups. Ethnobiologists disagree about which higher order classes are necessarily part of a folk classification. For example, a dominant line of thought maintains that there should be a universal model of classification that includes the basic rank (e.g., folk genus), a rank that divides the basic rank (folk varieties), a higher order rank that groups the basic rank (intermediate ranks) and a unique beginner (Atran 1990; Berlin 1992; Raven et al. 1971). After much scholarly debate, there appears to be a consensus favoring expanding the defining properties of higher order classes to include utilitarian, symbolic, and aesthetic considerations (Ellen 1993; Hunn 1976, 1982; Turner 1989). The existence of cross-cutting higher order groups, however, is still considered problematic for the idealized ethnobiological model that emphasizes such groups as nontransitive and mutually exclusive (see Needham 1975 regarding polythetic classification).

TABLE 1.—Iskatewizaagegan (Anishinaabe) generics. Includes alternate nomenclature, folk varieties, common English names, and Latin nomenclature.

Iskatewizaagegan generic[1] (alternate nomenclature) •folk variety	Other Ojibway generics[2]	English name	Latin binomial[3]
aagimaatig/oog (aagimaak/og)	aagimaak, wiisagaak	black ash	*Fraxinus nigra* Marsh.
aasaakamig	–	'moss'	Sphagnaceae, Dicranaceae, Hylocomiaceae, Hypnaceae, and Brachytheciaceae
agwisimaan/ag	–	pumpkin, squash, and watermelon	*Cucurbita pepo* L. and *Citrullus colocynthis* (L.) Schrad.
ajidamowaanow/an	ajidamoowaanow	foxtail barley and rusty woodsia	*Hordeum jubatum* L. and *Woodsia ilvensis* (L.) R. Br.
amikominaatig/oog	–	black gooseberry/bristly black currant	*Ribes lacustre* (Pers.) Poiret.
aniib (aniibaatig/oog)	aniib	American elm	*Ulmus americana* L.
aniibiminaatig/oog (aniibimin/an)	aniibimin	highbush cranberry	*Viburnum trilobum* Marsh.
animozidens/an	–	little prickly pear cactus	*Opuntia fragilis* (Nutt.) Haw.
azaadi/iig	azaadi (i)	trembling aspen	*Populus tremuloides* Michx.
babiigobagoon	animikiibag	poison ivy	*Rhus radicans* L.
bagaaniminzh/iig (bagaan/ag)	bagaanimizh	beaked hazelnut	*Corylus cornuta* Marsh.
bagesaanaatig/oog (bagesaan/an)	bagesaanaatig (-oog)	Canada plum tree	*Prunus nigra* Ait.
bigiiwaatig/oog (bigiiwaandag)	aninaandag (-oog), iniwaandag (-oog), bigiwaandag (-oog), zhingob (-iig), zhingobaandag (-oog), zhingob bigiwaandag	balsam fir	*Abies balsamea* (L.) P. Mill.
biiweshkanag	apakway, apakweshk, apakweshkway, nabagashk	cattail	*Typha latifolia* L.
bingomin/an	–	velvetleaf blueberry	*Vaccinium myrtilloides* Michx.
gaadakaasing/in	aandegobagoons, namepin, namewashkoon	Canada mint	*Mentha arvensis* L.
gaagagiwaandag/oog (gaagagiwaandagomin/an)	giizhigaandagizi/ogaawalinzh	common juniper	*Juniperus communis* L.

TABLE 1.—Continued.

Iskatewizaagegan generic[1] (alternate nomenclature) •folk variety	Other Ojibway generics[2]	English name	Latin binomial[3]
gaagigebag/oon	gaagigebag	prince's-pine; pipsissewa	*Chimaphila umbellata* (L.) Bart.
gaazhooshkwanagizid zhingwaak	apakwanagemag, bapakwanagemag, zhingobiins, zhingwaak	red pine; Norway pine	*Pinus resinosa* Ait.
gichianiibiish/an	–	ostrich fern	*Matteuccia struthiopteris* (L.) Todaro.
gichigamiiwashk/oon	anaakan, anaakanashk, (gi)chigamiiwashk	great bulrush	*Schoenoplectus acutus* (Muhl. ex Bigelow) A. Löve & D. Löve
giizhikaandag/oog (giizhik/oog)	giizhik, gizhikens, giizhikaandag	Eastern white cedar	*Thuja occidentalis* L.
ginebigowazh/iin	–	'fern'	*Matteuccia* sp., *Polypodium* sp., and other fern species.
maananoons/ag	maananoons	ironwood; hop-hornbeam	*Ostrya virginiana* (Mill.) K. Koch
maanazaadi/ig	man'asa'di	black poplar	*Populus balsamifera* L.
maanzhi-mitigominzh	–	poison oak	*Rhus* sp.
makominaatig/oog (makomin/an)	–	wild black currant	*Ribes americanum* Miller
makwaminaatig/oog (makwamin/an)	adjimag	showy mountain ash	*Sorbus decora* (Sarg.) C.K. Schneid.
manidookaadaak/wog	wanúkons', abagwasî'gans	water hemlock	*Cicuta maculata* L.
manidoominaatig/oog (manidoomin/an)	–	red baneberry and blue-bead lily	*Actaea rubra* (Ait.) Willd. and *Clintonia borealis* (Ait.) Raf.
manoomin (manoominaatig/oon, manoominashk/oon)	manoomin	wild rice	*Zizania aquatica* L. and *Z. palustris* L.
waabimanoomin	–	white rice	*Oryza sativa* L.
mishtadimanoomin	–	oats	*Avena* sp.
mashkiigikamig	–	sphagnum moss	*Sphagnum* spp.
mashkiigobag/oon	mashkiigobag, mashkiikaang niibiish, waabashkikiibag	Labrador tea	*Ledum groenlandicum* Oeder

TABLE 1.—Continued.

Iskatewizaagegan generic[1] (alternate nomenclature) •folk variety	Other Ojibway generics[2]	English name	Latin binomial[3]
mashkiigomin/an	mashkiigiminagaawanzh, mashkiigimin (-an)	bog cranberry	*Vaccinium oxycoccos* L.
mashkiigwaatig/oon (mashkiigwaandag/oon)	mashkiigwaatig	tamarack; larch	*Larix laricina* (Du Roi) K. Koch
mazaanishk/oog	mazaan, mazaanaatig	stinging nettle	*Urtica dioica* L.
miin/an (miin/an, miinaatig/oog)	–	blueberry (low-bush blueberry; narrow-leaved blueberry)	*Vaccinium angustifolium* Ait.
•makade-miin/an		black blueberry	*V. angustifolium* Ait.
•zhaabwaate-miin/an		transparent blueberry	*V. angustifolium* Ait.
miinensiwaatig/oon (miinensan)	agin, (-iig), mine'saga'wûnj	scarlet hawthorn	*Crataegus coccinea* L.
miishijiiminaatig (miishijiimin/ag)	waaboozojiibik, micidji'minaga'wû	skunk currant	*Ribes glandulosum* Graver
mina'ig/oog	gaawaandag, gaawaandagwaatig, mina'ig, wadab, zesegaandag	white spruce; highland spruce	*Picea glauca* (Moench) Voss
mishkosiiwiingoshk	–	sweetgrass	*Hierochloe odorata* (L.) Beauv. = *Anthoxanthum nitens* (Weber) Y. Schouten & Veldkamp
miskominaatig (miskomin/an)	miskominagaawanzh, miskomin	wild red raspberry	*Rubus idaeus* L. var. *strigosus* (Michx.) Maxim.
miskwaabiiminag/oog	–	red osier dogwood	*Cornus sericea* L. syn. *C. stolonifera* Michx.
mitigominzh/iig	mitigomizh	bur oak	*Quercus macrocarpa* Michx.
mndaamin/ag	–	corn	*Zea mays* L.
nabagishkoon	–	water sedge	*Carex aquatilis* Wahl.
namepin	namepin	wild ginger	*Asarum canadense* L.
nengaaminaatig/oog (nengaamin/an)	sewa'komin	sandcherry	*Prunus pumila* L.
niibaayaandag	ne'bagandag	Canada yew; ground hemlock	*Taxus canadensis* Marsh.
obwaayiminaatig/oon (obwaayimin/an)	bawa'iminaan, gozigwaakomin	pincherry	*Prunus pensylvanica* L.F.

TABLE 1.—Continued.

Iskatewizaagegan generic[1] (alternate nomenclature) •folk variety	Other Ojibway generics[2]	English name	Latin binomial[3]
ode'iminaatig/oog (ode'imin/an, ode'iminbag/oon, ode'iminjiibik)	ode'iminidjiibik, ode'imin (-an),	woodland strawberry and wild strawberry	*Fragaria vesca* L. and *F. virginiana* Duchesne.
ogidibag/oon	nbiish-waawaasgone, oga'damûn, odite'abûg	small yellow pond-lily and white waterlily	*Nuphar variegatum* Engelm. and *Nymphaea tetragona* Georgi.
ogin/iig	–	tomato	*Lycopersicon esculentum* Miller
oginiiwaabigwanaatig/oog (oginiiwaabigwan/iin)	–	prickly rose	*Rosa acicularis* Lindley
ogishkibwaak/wog	a'skibwan'	Jerusalem artichoke	*Helianthus tuberosus* L.
okikaandag (washkaandag, akikaandag)	okikaandag	jack pine	*Pinus banksiana* Lamb.
opin/iin	–	potato	*Solanum tuberosum* L.
oshkiinzhigoaatig/oog (oshkiinzhigomin/an)	ski_gu-min	dewberry	*Rubus pubescens* Raf.
osisaweminaatig/oog (osisawemin/an)	asa/isaweminagaawanzh	chokecherry	*Prunus virginiana* L. var. *virginiana*
ozhaaboominaatig/oog (ozhaabomin/an)	zhaaboomin (-ag), zhaaboominagaawanzh	Northern gooseberry; bristly wild gooseberry	*Ribes oxyacanthoides* L.
ozhashkwedow	–	fungus	[no specific type identified]
ozigwaakominaatig/oog (ozigwaakomin/an)	gozigwaakominagaawanzh, gozigwaakomin (-an), ozagadigom	Saskatoon berry	*Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roemer. and *Amelanchier* sp.
waaboozojiibik/an	bebaamaabiig, okaadaak, waaboozojiibik	wild sarsaparilla	*Aralia nudicaulis* L.
wiigob/iig	oziisigobimizh	Bebb willow and willows	*Salix bebbiana* Sarg. + *Salix* sp.
wiigwaasaatig/oog (wiigwaas)	wiigwaas (-an) (-ag), wiigwaasaatig, wiigwaasi-mitig, wiigwaasimizh	paper birch	*Betula papyrifera* Marsh.
wiike	wiikenh, nabagashk, mashkosii-zhaabozigan	sweet flag	*Acorus americanus* (Raf.) Raf.
wiimbashk (omagakiiwibag/oon)	ozaawashkojiibik	spotted touch-me-not	*Impatiens capensis* Meerb.

TABLE 1.—Continued.

Iskatewizaagegan generic[1] (alternate nomenclature) •folk variety	Other Ojibway generics[2]	English name	Latin binomial[3]
wiingwashk	bizhikii-wiingashk, bizhikii-wiingwashk	sage	*Artemisia frigida* Willd. and *Artemisia* sp.
wiinisiibag/oon	wiinisiibag, wiinisiibagoons, wiinisiibagad	wintergreen; teaberry	*Gaultheria procumbens* L.
zagataagan	–	tinder fungus	*Inonotus obliquus* (Ach. ex Pers.) Pil.
zesegaanaatig/oog (zesegaandag/oog)	gaagaagiwanzh, zesegaandag, zhingob, zhingob gaawaandag	black spruce	*Picea mariana* (Mill.) BSP
zhaashaagomin/an	ode'iminijiibik, zhakaagomin, zhaashaagomin	bunchberry	*Cornus canadensis* L.
zhigaagominzh/iig	bagwaji-zhi/agaagawinzh (-iig), mashkode-zhi/agaagawanzh (-iig)	pink-flowered onion	*Allium stellatum* Fraser
zhiiwijiibik	ozagadigom	long-styled sweet cicely	*Osmorhiza longistylis* (Torr.) DC.
zhingwaak	zhingwaak	white Pine	*Pinus strobus* L.
ziinzibaakwadwaatig/oog	–	Manitoba maple; box elder	*Acer negundo* L.

[1] Singular form of plant names listed unless elders thought the name was commonly used in its plural form. The plural affix is indicated following the/sign. Alternate naming for a plant is discussed in the text; see also Tables 4 and 5.
[2] Other Ojibway generics compiled from Densmore (1974) and Meeker et al. (1993). The latter compiled the plants recorded by the main Ojibway ethnobotanies of Densmore (1928), Gilmore (1933), Hoffman (1891), Reagan (1928), and Smith (1923).
[3] Scientific nomenclature follows treatment by Marles et al. (2000) where possible. If a plant is not included in Marles (2000), then Farrar (1995), Soper and Heimburger (1982), Newmaster et al. (1998), or Gleason and Cronquist (1991) are followed in order.

TABLE 2.—Some plants that were utilized but not named by Iskatewizaagegan elders.

English Name	Scientific Name	Use
Great burdock	*Arctium lappa* L.	medicinal
Lady's slipper	*Cypripedium* spp.	ornamental
Puffball fungus	*Lycoperdon* spp.	medicinal
Rock polypody	*Polypodium virginianum* L.	medicinal
Wintergreens	*Pyrola* spp.	medicinal
Common mullein	*Verbascum thapsus* L.	medicinal

Some authors have recognized that an odd contradiction emerges when cross-cutting groups are excluded from an ethnobiological system of classification simply on the basis of philosophical propositions (Clément 1990). In his work with the Tobelo people, Taylor (1990) provides examples of cross-cutting groups. Some authors who have included such cross-cutting groups in their analyses use the general term ''major plant groups'' (Johnson 1999; Turner 1987).

Similar to Johnson's (1999) and Taylor's (1990) findings, the class of a unique beginner that would be the equivalent of plant (Plantae) appears to be a covert class in Anishinaabe. Elders, all of whom are bilingual, recognized that we were not talking about knowledge related to what are called animals, fish, and birds in English. However, when pressed for an Anishinaabe word that would include all of the things that are included in the English term for plant, they were not able to provide such a word. More work would be required to conclude that the unique beginner exists as a covert class in Anishinaabe, or that elders recognize this class on the basis of their familiarity with the English taxon 'plant'.

Although taxa in many systems of ethnobiological classification are not well developed at the rank of kingdom, there are often those that are similar to the botanical concept of life form (Berlin 1992). There are a number of names that we consider to indicate higher order, life form taxa (Table 3). Examples include: ***aasaakamig*** 'moss/lichen', ***ginebigowazhiin*** 'fern', ***mitigoog*** 'tree', ***mishkosii*** 'grass', and ***ozhashkwedow*** 'fungus'. We are not able to derive equivalent terms for shrubs or herbs. Membership in these classes is based upon the morphological characters of the individual being. An individual being can not be both ***aasaakamig*** and ***mitigoog***; these taxa meet the non-transitive and mutually exclusive conditions. Some of these life forms include named, basic rank taxa, while for others the taxa at that rank are covert. For instance, ***aasaakamig*** 'moss/lichen' includes the named generic ***mashkiigikamig*** 'sphagnums' as well as a covert taxon named lichens in English. ***Mitigoog*** 'trees' includes many different named basic ranks such as ***aagimaak***, ***bigiiwaatig***, ***wiigwaasaatig***, and ***ziinzibaakwadwaatig***.

Table 3 also demonstrates the appearance of higher order taxa whose rank is unclear. Taylor (1990) also noted that for an empty group, it is often difficult to determine the appropriate rank specified by the existence of a name. For example, ***agwisimaanag*** includes pumpkins and squashes (*Cucurbita pepo*) and watermelons (*Citrullus colocynthis*). Is this a life form class with defining properties or a basic rank divided into unnamed folk varieties of pumpkin, squash, and watermelon? In this case, historically, only squashes were grown. This suggests that ***agwisimaanag*** was likely to have been a basic rank taxon

TABLE 3.—Iskatewizaagegan classes that group basic rank individuals.

Major plant group	Class properties or closest English gloss	Members
aasaakamig	bryophytes	mosses, lichens, ***mashkiigikamig***
agwisinaanag	cucurbits	*Cucurbita pepo* L., *Citrullus colocynthis* (L.) Schrad.
ginebigowazhiin	ferns	***gichianiibiish***, other ferns
manidoo-	This prefix refers to a class of plants that have the property of ***manaa miijin*** that can be glossed as 'be careful eating'. This is a general prohibition as opposed to the specific prohibition of ***ginaa poonga*** glossed as 'don't eat this' and currently used as a gloss for food allergies.	***manidoominaatig***, ***manidookaadaak***
mashkiigo-	This prefix refers to a class of plants whose members have the property of growing in an ecological location that can be glossed in English as muskeg.	***mashkiigobag***, ***mashkiigikamig***, ***mashkiigomin***, ***mashkiigowaatig***
mashkiki	This word is often glossed in English as medicine. This class includes members who have the property of being used as a medicine.	Most taxa in Table 1 can be included in this class.
mishkosii	grasses	***mishkosiiwiingoshk***
mitigoog	tree	***aagimaak***, ***aniib***, ***bigiiwaatig***, ***zhingwaak***
ozhashkwedow	fungi	'mushrooms', 'conks'
wiigobiig	willows	*Salix* spp., ***miskwaabiiminag***
wiingwashk	This word is often glossed in English as smudging. This class includes members who can be burned as part of purification rituals.	***wiingwashk***, ***mishkosiiwiingoshk***
zhingobiig	There is no clear English gloss for this group. The class includes members who have the property of short needles that are not completely shed in the fall. The class also appears to refer to those basic rank individuals whose boughs can serve similar functions.	***mina'ig***, ***bigiiwaatig***, ***zesegaanaatig***
zhingwaak	pines	***zhingwaak***, ***gaazhooshkwanagizid zhingwaak***, ***okikaandag***

signifying squash. But as new cucurbits were introduced, this name came to be applied to pumpkins, watermelons, and cucumbers that the elders know by their English common names. It is interesting to speculate that this term now signifies both a basic rank taxon and a life form group. The latter includes the original

prototypical folk generic as well as other folk generics that are signified with English names.

Other cases that are unclear are ***ozhashkwedow***, ***ginebigowazhiin***, and ***zhingwaak***. In the case of ***ozhashkwedow***, the difficulty emerges from the lack of named taxa within the group. In the case of ***ginebigowazhiin***, there was not a clear consensus surrounding the taxon ***gichianiibiishan***. For some people the group was empty while for others it contained one named and other unnamed taxa. ***Zhingwaak*** is similar to the other two cases, but has its own unique difficulty. Some people consider ***okikaandag*** to be a taxon within the ***zhingwaak*** group, other people consider both to be taxa, while others suggest that there is only one ***zhingwaak*** with three distinct appearances. This is an example where a name could refer to a higher order group or a basic rank group with subdivisions (i.e., folk varieties). However, in all these cases the lack of clarity as to the rank of the name does not contradict the basic rules of Berlin (1992).

There are also higher order groups that do contradict the rules and which we include here as major plant groups. The difference between these classes and life forms is that a taxon can belong to more than one of these groups. For example, one such group is identified through the prefix ***manidoo*** 'Creator'. The defining property of this class is that its members are powerful plants that should not be touched by just anyone and carry the warning ***manaa miijin*** 'be careful eating'. The group includes ***manidoomin*** 'Creator's berries' and ***manidookaadaak*** 'Creator's taproot'. The former includes *Actea rubra* and *Clintonia borealis* while the latter is *Cicuta maculata*; all have poisonous properties.

The prefix ***mashkiigo-*** denotes a group of plants found in an ecological location often called muskeg in English. This habitat is often a wet, mossy area of black spruce and sphagnum moss overlaying earth instead of water. Another major plant group is denoted by the term ***wiingwashk***. The defining property of this group is that all members can be used for smudging, which is a ceremony that links fragrance, purification, and power. Similarly, there is also the major plant group of ***mashkiki***, the defining property of which seems to be the plant's use as 'medicine'. However, the term medicine requires further work as it signifies a broad class of substances (drugs) and practices (healing) in Anishinaabe thought; it is not clear if all plants have this defining property, or if there are some that would not be included within the category of medicine.[8]

In two other cases, it was difficult to determine whether the term was an example of polysemy at the basic rank, or a major plant group. This occurred in the cases of ***zhingobiig*** and ***wiigobiig*** presented in Table 3. In some Anishinaabe ethnobotanies, the term ***zhingobiig*** has been posited as an example of polysemy, as described by Berlin (1992) and Taylor (1990), in which the name applies to a contrasting set of basic rank taxa. This name is applied to the prototypical member, as well as unnamed covert basic rank taxa, and the group may also include other named taxa. In areas where the knowledge of the names of the basic rank taxa are no longer known, ***zhingobiig*** will often be applied to any of ***mina'ig*** (*Picea glauca*), ***bigiiwaatig*** (*Abies balsamea*), and ***zesegaanaatig*** (*Picea mariana*). We suggest that this example provides an interesting contrast to the example of cucurbits. In that case, there is the possibility that ***agwisimaanag*** became polysemous due to the introduction of new contrasting basic rank taxa.

In the example of ***zhingobiig***, the term may have become polysemous in areas where the names for contrasting basic rank taxa were eroded from the local lexicon. According to our research, ***zhingobiig*** appears to be a major plant group. The defining property of this class is that the boughs have similar functional characteristics that make them useful for things such as providing the flooring within a living structure.

Another major plant group that follows this pattern is that of ***wiigobiig***, which may be glossed as 'willows' in English. This group includes *Salix* spp. as well as ***miskwaabiiminag*** (*Cornus sericea*), a similar grouping noted by Johnson (1999) for the Gitksan. It is not clear whether the *Salix* spp. included in the ***wiigobiig*** are considered as one basic rank taxon or a set of contrasting, covert taxa. It is clear, however, that the defining property of the major plant group is flexible stems that can be used for making things like basket rims. It is this defining property that brings ***miskwaabiiminag*** into the ***wiigobiig*** group.

The taxonomic structure of the Iskatewizaagegan system of plant classification supports the proposition that a basic rank is ontologically privileged; taxa of this rank can be subdivided (folk varieties) and grouped into classes (life forms, major plant groups). Our research also supports the notion that folk taxonomies have shallow hierarchies. However, we include major plant groups with defining properties that are chemical (e.g., poison), ecological (e.g., muskeg), functional (e.g., medicine/construction), and ceremonial (e.g., smudging).[9]

Plant Nomenclature.—Some ethnobotanists have insisted that nomenclature should be considered as its own process distinct from both classification and identification (e.g., Taylor 1990). While classification focuses on how groups are created, nomenclature looks at the rules by which a name is applied to a group. For example, plant taxonomists follow very strict formal rules of nomenclature (Woodland 1997). The emphasis of the rules, in this case, is to standardize the form of a name for a taxon that is universal and independent of any particular context.

Nomenclature in an Iskatewizaagegan system of plant classification operates on the epistemological basis for learning plants (taxa), and plant names (nomenclature); knowledge is learned as you do things within a context of being on the land (Davidson-Hunt and Berkes 2003a). Anishinaabe nomenclature rules modify the form of the name depending upon the context within which the name is being used. There is no rule that requires a universalized name to be created. In understanding this basic rule of nomenclature it becomes possible to understand why a name for a folk generic can take different lexical forms.

Since eliciting names is basic to the method of ethnobotany, it is important to find out whether a variation in a name signifies different taxa at the basic rank, or is simply one taxon with many names (Taylor 1990). When we encountered variations in names among elders, and between our data and other Ojibway ethnobotanies, we decided to examine the construction of names to clarify what the variation signified. Tables 4 and 5 reflect the results of this work. Many names are constructed on the basis of lexemes for what Johnson (1999) calls plant partons. For instance, a tree name can be constructed in such a way as to specify the boughs by using the affix ***-aandag***. In the case of ***giizhikaandag*** this is done to specify the cedar bough, but can also be used to refer to the whole organism,

TABLE 4.—Lexemes (affixes) and nouns related to Iskatewizaagegan plant knowledge.

Aniishinaabe	English Gloss
-aandag/oog	Affix that specifies bough/boughs
-aatig/oog	Affix that specifies the bole of a tree or a woody stalk of a herbaceous plant
aniibish/un	Noun that can be glossed as leaf/leaves
-a-shk/oon	Affix that specifies grassiness
-bag/oon	Affix that specifies leaf/leaves
-kaadaak	Affix that specifies taproot
-min/an	Affix that can specify a fleshy berry or a grain of a plant. This can be contrasted to ***miinan*** that specifies the blueberry group of plants.
-jiibik	Affix that specifies root
okandamin/an	Noun that can be glossed as stone pits
-minzh	Affix used to refer to the edible nuts of a tree and the edible bulb of an onion
bagaan/ag	Noun that can be glossed as nut/s
bagesaan/an	Noun that can be glossed as fruit/s
waabigwan/iin	Noun that can be glossed as flower/s (can also be an affix that specifies flower)
waanagek	Noun that can be glossed as bark
wadab/iig	Noun that can be glossed as root/s
wadabiins	Diminutive noun of root. Often refers to thin roots that were used when sewing, for example, baskets and canoes made out of birch bark

while the word ***giizhik*** is commonly utilized to refer to the whole organism if there is no reason to specify the boughs. The word ***okikaandag*** can be glossed 'jackpine bough' but is also used to refer to the whole tree itself.

This pattern repeats itself for ***-aatig***, which can be glossed as 'stick', but refers to the hard or stiff nature of the supporting structure. Black ash (*Fraxinus nigra*) can be called ***aagimaak*** or ***aagimaatig***, just as paper birch (*Betula papyrifera*) may be called ***wiigwaas*** or ***wiigwaasaatig***. ***Wiigwaas*** also specifically refers to the birch bark. Likewise, the affix ***-bagoon*** can be part of the construction of a category name. Wild strawberries (*Fragaria* spp.) are named ***ode'iminbag*** in this research. Densmore (1928) records the name, using current Anishinaabe orthography, as ***ode'iminijiibik***. In this current research, the word provided by the elder includes a lexeme that refers to the leaf. In the case of Densmore (1928) it refers to the roots of the same taxon. The same group could also have been signified by the word ***ode'imin***, signifying the berry, and providing another name variation using the lexeme ***min***.

Another interesting variation is the group of 'berry-stick.' These are the shrubby trees that provide fruit and medicine from their bark. There is no confusion, for Iskatewizaagegan people, when pin cherry (*Prunus pensylvanica*) is called ***obwaayimin*** or ***obwaayiminaatig***. It simply reflects a specification of the whole organism; the name dependent upon the context of who and what is being signified. In the former, the word emphasizes a situation in which the fruit is being talked about as a food, while in the latter, it is the bark as medicine that is of interest.

TABLE 5.—Examples of how plant nomenclature can be constructed using lexemes that specify plant structures.

Plant structure (singular/plural)	Description	English gloss	Examples
-aandag/oog	This affix specifies bough(-s).	bough	gaagagiwaandag, giizhikaandag, mashkiigwaandag, okikaandag
-aatig/oog	This affix can be glossed as 'stick'. The term refers to the woodiness or stiffness of the stem or trunk of a plant.	stiff-stemmed	aagimaatig, manoominaatig, mashkiigwaatig, miinensiwaatig, wiigwaasaatig, ziinzibaakwadwaatig
-bag/oon	This affix refers to a plant with a leafy nature or the leaves of a plant.	leaves	babiigobagoon, gaagigebagoon, mashkiigobagoon, ode'iminbagoon, ogidibagoon
-jiibik	This affix refers to the roots of a plant.	roots	ode'iminjiibik, zhiiwijiibik
-kaadaak/wog	This affix refers to a specific type of root structure.	taproot	manidookaadaak
-min/an	This affix refers to berries. The term includes the fleshy berries such as a chokecherry or raspberry and what are commonly known as grains, such as a wild rice seed and corn kernels.	berries	amikominan, maanomin, mashkiigominan, obweminan, oshkiizhigominan, ozigwaakominan, oteiminan, shaashaagominan
-minaatig/oog	The term can be glossed as 'berry stick'. It refers to the characteristics of the plant in that they have berries and woody trunks or stiff stems.	Stiff-stemmed with berries	manoominaatig, makominaatig, miinaatig, miishijiiminaatig, miskominaatig, nengaaminaatig, obwaayiminaatig, osisaweminaatig, ozhaabominaatig, ozigwaakominaatig

In Table 6 the translations of the names are provided along with the general use category and plant structures that are used. These represent the combined knowledge of elders collected during the current research, along with information recorded in previous ethnobotanies. Understanding which parts of a plant are used helps to clarify the possible lexical forms that may be constructed for a taxon; conversely the lexical form chosen tells us something about the part of a plant utilized. The lexical form uttered emerges out of the context in which reference is being made to the plant. So a plant whose leaf is medicine will be signified using one lexical form. There will be another lexical form if the same

TABLE 6.—Etymology, documented plant uses and structures utilized.

Iskatewizaagegan generic	Etymology/English gloss	Documented uses[1]	Documented plant structures utilized[2]
aagimaak/og	***agiim*** = snowshoe	medicinal, technological, ritual	branch wood, sapling, outer bark, inner bark, emerging buds
agwisimaan/ag	cucurbits	food	fruit
ajidamowaanow/an	***ajidamo*** = squirrel; ***waanow*** = tail	medicinal	leaf or frond
amikominaatig/oog	***amik*** = beaver	food, medicinal	berry, bark, twig, leaf
aniib	–	shade, medicinal	whole tree, root bark
aniibiminaatig/oog	–	food, medicinal	berry, stem, root, inner bark
animozidens/an	***aniimo*** = dog; ***ziitens*** = diminuitive of paw	–	–
azaadi/iig	–	medicinal, technological	emerging buds, wood, outer bark, inner bark, root, ash, cambium
babiigobagoon	***baabiigose*** = rash	poisonous	–
bagaaniminzh/iig	***bagaan*** = nut; ***ominzh*** = edible flesh of a nut or bulb	food, medicinal, technological, ritual	nut, twig, root, inner bark, outer bark,
bagesaanaatig/oog	***bagesaan*** = fruit and is now used to refer to what are called fruits in English	food, medicinal	fruit, stem, bark, root
bigiiwaatig/oog	***bigiw*** = tree gum	medicine, technological	twig, needle, outer bark, inner bark, root, sap
biiweshkanag	***biiwesh*** = the layer of downy fur found under the exterior coat of an animal; ***kanag*** = blade of grass	food, medicinal, technological, ritual	immature leaf base, rhizome, immature flowering stalk, immature shoots, mature seed head
bingomin/an	***bingwi*** = ashes	–	–
gaadakaasing/in	***dakaasing*** = the thing that is refreshing	food, medicinal, technological	leaf, stem, flower, whole plant
gaagagiwaandag/oog	–	medicinal, technological, ritual	needle, cone/berry, inner bark, debarked stem, bough, root
gaagigebag/oon	***gaagige*** = everlasting	medicinal	root, whole plant
gaazhooshkwanagizid zhingwaak	***gaazhoosh*** = smooth; ***kwanagizid*** = bark	medicinal, technological	wood, needle

TABLE 6.—Continued.

Iskatewizaagegan generic	Etymology/English gloss	Documented uses[1]	Documented plant structures utilized[2]
gichianiibiish/an	***gichi*** = big; ***aniibiish*** = leaf	food, medicinal	immature leaf frond, root
gichigamiiwashk/oon	***gichigami*** = large body of open water; ***washkon*** = grassiness	food, medicinal, technological	immature shoots and leaf base, stem pith, leaf
giizhikaandag/oog	–	medicinal, ritual	bough, leaf
ginebigowazh/iin	***ginebig*** = snake; ***wazh*** = plants connected together by underground roots	–	–
maananoons/ag	–	medicinal	outer bark, branch (wood + bark), heartwood, wood
maanazaadi/ig	–	medicinal	emerging buds
maanzhi-mitigominzh	–	–	–
makominaatig/oog	***mako*** = bear	food, medicinal	berry, stem bark, root bark, root, young leaf, whole stem
makwaminaatig/oog	***makwa*** = bear	food, ritual	berry, outer bark, inner bark, peeled branch, root, stem
manidoominaatig/oog	***manidoo*** = Creator	poisonous	–
manidookaadaak/wog	***manidoo*** = Creator	poisonous	–
manoomin	–	food	seed
mashkiigobag/oon	***mashkiig*** = muskeg	food, medicinal, ritual	leaf
mashkiigomin/an	–	food, medicinal, technological	berry, whole plant
mashkiigwaatig/oon	–	medicinal, technological	wood, branch, inner bark, outer bark
mazaanishk/oog	***mazaan*** = dust that is created when threshing ***manoomin*** and results in itchiness	food, medicinal, technological	immature leaf, stem, stem fiber, root
miin/an	–	food, medicinal, technological, ritual	berry, leaf, flower, stem, root, whole plant
makade-miin/an	***makade*** = black	–	–
zhaabwaate-miin/an	***zhaabwaate*** = translucent	–	–
miinensiwaatig/oon	***miinensan*** = red berries	food, medicinal, technological	bark, berry, thorn, root

TABLE 6.—Continued.

Iskatewizaagegan generic	Etymology/English gloss	Documented uses[1]	Documented plant structures utilized[2]
miishijiiminaatig	***miishi*** = fuzzy; ***jii*** = descriptor of something that has a globular nature	food, medicinal	berry, stem, root, bark,
mina'ig/oog	–	medicinal, technological	twig, inner bark, outer bark, root, needle, bough
mishkosiiwiingoshk	***mishkosii*** = grassiness	ritual	above ground whole plant
miskominaatig	***misko*** = red	food, medicinal	berry, immature leaf, root, root bark, peeled young stem
miskwaabiiminag/oog	–	technological	young stem
mitigominzh/iig	***mitig*** = lifeform similar to English 'tree'; ***ominzh*** = edible nut or bulb	food, medicinal, technological, ornamental	acorn, bark, wood, whole tree, inner bark
mndaamin/ag	–	food	seed
nabagishkoon	***nabag*** = flat; ***-shkoon*** = grassiness	medicinal	root
namepin	***name*** = sturgeon	food, medicinal	root
nengaaminaatig/oog	–	food	fruit
niibaayaandag	***niibaay*** = the quality of light found at twilight	medicinal	bough
obwaayiminaatig/oon	–	food, medicinal, technological	fruit, leaf, root, inner bark, bark
ode'iminaatig/oog	***ode'*** = heart	food, medicinal	berry, leaf, root, stolons, root ash, whole plant
ogidibag/oon	***ogidi*** = locative referring to being on top	food, medicinal	rhizome
oginii	rosehip, but the word is now also used for tomato	food	fruit
oginiiwaabigwanaatig/oog	–	– –	– –
ogishkibwaak/wog	–	food	tuber
okikaandag	–	medicinal, technological	wood, bark, inner bark
opin/iin	a tuber, but name now used for potato	food	tuber
oshkiinzhigoaatig/oog	***oshkiinzhig*** = eye	food, medicinal	berry, root
osisaweminaatig/oog	–	food, medicinal, technological	fruit, leaf, young stem, bark, root, branch

TABLE 6.—Continued.

Iskatewizaagegan generic	Etymology/English gloss	Documented uses[1]	Documented plant structures utilized[2]
ozhaaboominaatig/oog	–	food, medicinal, technological	berry, stem, root, thorn
ozhashkwedow	–	technological, ritual	conk, tinder fungus
ozigwaakominaatig/oog	–	food, medicinal, technological	berry, stem, bud, wood, root, bark
waaboozojiibik/an	***waaboozo*** = rabbit	medicinal	root, leaf, fruiting stalk, whole plant
wiigob/iig	–	technological, medicinal, ritual	stem, twig, wood, outer bark, inner bark, inner root bark, outer root bark
wiigwaasaatig/oog	***wiigwaas*** = birch bark	food, medicinal, technological, ritual	bark, sap, twig, bud, wood, branch
wiike	–	medicinal, ritual	rhizome
wiimbashk	hollow	medicinal	stem juice, leaf
wiingwashk	–	medicinal, technological, ritual	stem, leaf, flower, whole plant above ground
wiinisiibag/oon	***wiinisii*** = evergreen	food, medicinal	leaf, berry, whole plant
zesegaanaatig/oog	–	medicinal, technological	twig, inner bark, outer bark, root, needle, bough
zhaashaagomin/an	***zhaashaa*** = chewing	food (emergency), medicinal	berry, root
zhigaagominzh/iig	***zhigaag*** = skunk; ***ominzh*** = edible flesh of a nut or bulb	food, medicinal	bulb
zhiiwijiibik	***zhiiwi*** = sweet	medicine	root
zhingwaak	–	medicinal, technological	sapling stem, wood, sap, needle,
ziinzibaakwadwaatig/oog	***ziinzibaakwad*** = sugar made from tree sap and also now used to refer to same group of substances named sugar in common English usage.	food	sap

[1] Medicinal uses indicated by Iskatewizaagegan people are not specified as per research protocol. Uses are those that are in the public domain. Most medicinal and spiritual uses recorded require compound mixtures of plants. Plants should not be used medicinally or ritually without guidance from an elder. Uses follow Marles et al.'s (2000) broad categories of food, technological, medicinal, and ritual. Decorative has been added for plants noted as visually pleasing but for which no other specific use has been attributed.

[2] Uses and plant partons utilized compiled from Densmore (1974), Marles et al. (2000), and Meeker et al. (1993).

plant has berries that are food. The construction of the word will be based upon the root lexeme for the plant plus a lexeme that refers to the plant parton for a specific use. For an Anishinaabe speaker, both lexical forms would signify the same folk generic, so it would be inappropriate to infer that this demonstrates disagreement about the name of a taxon.

The importance of context in relation to the name utilized also became apparent during verification workshops. Long discussions occurred among the elders as to the name that should be utilized for a taxon that is devoid of context. When we wanted to place an Anishinaabe name on the collection labels it was not clear which lexical form to utilize even when we had agreement on the folk generic it represented. Should we create a set of rules that would standardize the written names on collection labels, should we simply list all the lexical forms, or should each Anishinaabe name represent a different specimen? We chose to utilize one name to refer to the type specimen of a folk generic based upon the following rules: shrubby berry plants use the suffix ***-minaatig***, herbaceous type plants use ***-bag***, and if a berry plant does not fit comfortably into either of these categories use ***-min***. This discussion highlights the need to examine critically name variations before they are accepted as signifying basic rank groups, higher order groups, or disagreement among people about what to call the plants (see also Taylor 1990). While it is often assumed that there is a one-to-one relationship between a name and a folk taxon, our research points out that the relationship can be many-to-one.

Plant Identification.—Plant identification is the process by which an organism that is encountered during day-to-day life is placed into a taxon, so that a name and other associated properties of the taxon can be attributed to that organism. In contrast, identification for Anishinaabe people is rooted in a phenomenology that insists that physical appearance (morphology) and location (ecology), while necessary diagnostic features, are not sufficient in and of themselves. Identification can only be completed by experiencing an individual organism in day-to-day life (Black 1977a, 1977b). The importance of experience and context is a general characteristic of all Anishinaabe systems of knowledge (Davidson-Hunt and Berkes 2003a).

Iskatewizaagegan elders do utilize visible characters to describe a particular organism. These include life form, leaf shape, flower shape, flower color, smell, root structure, and other visibly perceptual structural features of an individual organism. The context and location of where a plant is found is also important in the process of identification. Elders prefer to travel to a place to identify a plant, rather than have a plant brought to them to identify. A plant found in a known context or location provides more information that increases the level of comfort in identifying an individual. However, a final decision regarding identification is not made until an experience with the plant occurs and the person assesses the outcome of that encounter.

The need to assess outcome pertains to the spiritual beings who can occupy the forms of physical plants. A healer does not choose a plant but rather a plant being offers itself for healing. A healer may receive such a gift through a dream, vision, or other ceremony, while trying to heal someone. The healer will be given information to identify the physical form of the plant that should be used in the

healing process. This will include a constellation of features based upon physical characters and location but identification will also be assessed on the basis of the outcome of the healing process. A successful outcome indicates a successful identification while an unsuccessful outcome may imply misidentification. Becoming a powerful healer depends upon both the ability to identify the physical forms of plants as well as the ability to see the presence of a spiritual being within a plant. While plant identification on a day-to-day basis is often straightforward, it is important to note that identification can also include additional factors within an Anishinaabe system of plant classification.

DISCUSSION: TOWARD A HOLISTIC ANISHINAABE ETHNOBOTANY

We posed three puzzles that emerged out of our work with Anishinaabe elders regarding Iskatewizaagegan plant knowledge. First, why does our data support Berlin's (1992) suggestion that a basic rank of folk generics exists universally across societies but not his idea of nontransitive, higher order classes? Second, why do rules of Anishinaabe plant nomenclature allow multiple names for a taxon? Third, why were elders hesitant to assume that every plant encountered in the bush could be assumed to be a part of a taxon on the basis of physical characters or location? In order to explore these puzzles we used two approaches to represent the data we collected with Anishinaabe elders of Iskatewizaagegan. The first representation we presented was constructed with elders, and attempts to reflect Anishinaabe ontology and epistemology, while the second followed a standard ethnobotanical methodology. We organize our concluding discussion on the basis of these two approaches to represent Iskatewizaagegan plant knowledge.

The holistic representation of plant knowledge emplaces a system of plant classification within the total life ways of the Iskatewizaagegan Anishinaabe. Anishinaabe epistemology links the maturation of an Anishinaabe person and plant knowledge through an interweaving of Iskatewizaagegan institutions, practices, and world view. When Iskatewizaagegan plant knowledge is constructed as an abstract system of plant classification, or a set of plant names and uses, it becomes divorced from the place and people of Iskatewizaagegan; the familiar is rendered unfamiliar. Instead, a holistic representation is preferred that positions plants in relation to Anishinaabe ways of life. Individual plant beings and taxa are not considered to exist independent of a people or place within Anishinaabe ontology.

Second, identification of an individual as a member of a taxon requires more information than can be provided by a system of plant classification that separates the process of identification from an encounter with an organism. Iskatewizaagegan elders concur that processes of classification and nomenclature link taxa to associated names and properties. These processes differ from Linnaean taxonomic systems, however, in that direct experience of an individual organism is also a necessary diagnostic property for identifying a plant. This phenomenological approach to a system of plant classification is reinforced by epistemological principles, which stress that knowledge resides in the land, and is progressively revealed through an individual's experience of the land

(Davidson-Hunt and Berkes 2003a). The Iskatewizaagegan system of plant classification does not place authority regarding knowledge into an abstract system of classification divorced from a people and place.

The ontological, epistemological and phenomenological basis of a holistic approach to Iskatewizaagegan plant knowledge brings together the cognitive structure of classification and the importance of practice. The Iskatewizaagegan system of plant classification supports the ethnobiological proposition of a basic rank and also that of a shallow hierarchy. The basic rank of taxa appears to be stable, but is open to modification as is any dynamic system of knowledge, including that of Linnaean systems of classification (Berlin 1992; de Queiroz and Gauthier 1994). Higher order groups result in cases in which the rank specified by a word is unclear and others which contradict the idealized ethnobiological model. We see no reason to exclude such cases of cross-cutting, higher order groups from an Iskatewizaagegan system of plant classification, agreeing with Ghiselin (1999) that there are distinct advantages to being able to create such classes on the basis of different types of defining properties. Since these classes do not represent the idealized model they are often not documented and thus we diminish our understanding of a society's plant knowledge.

The holistic representation helped us to understand the basic proposition that knowledge resides in the individual beings of a place, and is revealed through the relationships between the whole being of a person and others, in the Creator's garden. This is why elders emphatically state that ethnobotanical writings cannot teach an Anishinaabe how to know plants, in spite of the importance of such documents in creating respect for their knowledge and their potential use in a school system. It is more important, in this perspective, to find ways for Iskatewizaagegan youth, adults, and elders to maintain the relationships within the Creator's garden, the substrate of survival and self-determination for a contemporary Iskatewizaagegan way of life (Davidson-Hunt and Berkes 2003b). In holistic ethnobotanical systems of plant knowledge, it is through the relationships within the Creator's garden that plant knowledge will remain dynamic and an integral part of the Iskatewizaagegan way of life.

NOTES

[1] First person singular refers to Davidson-Hunt as contrasted to colleagues of the Shoal Lake Resource Institute.

[2] In reference to the language, Anishinaabe and Ojibway are used interchangeably. Ojibway is more common in the ethnobotanical literature, while many communities, including Iskatewizaagegan, prefer to use Anishinaabe to refer to the language. Anishinaabe also can be used as an adjective to specify identity, i.e., Anishinaabe people. Anishinaabeg is used to refer to the collective identity of the society, i.e., the Anishinaabe people. Ojibway is retained when referring to historic documents that use the word to specify a collective identity.

[3] Voucher specimens were deposited in the Herbarium of the University of Manitoba (WIN) and can be examined with permission of the Shoal Lake Resource Institute. The

ethnobotanical collection provides labels with scientific name, Anishinaabe name, Universal Transverse Mercator (UTM) coordinates of collection, habitat, and general use categories. Vouchers are stored according to scientific classification (family, genus, species) or may be found in the alphabetical index of Anishinaabe ethnobotany vouchers.

[4] All materials (photographs, digital audio, digital video, interview transcriptions, and publications) produced during the research were duplicated and provided to the community. The Shoal Lake Resource Institute of Iskatewizaagegan No. 39 Independent First Nation is the keeper of these archives. SLRI has also made research products freely available within the community for purposes of education, healing, interpretive tourism, future research, and political negotiations.

[5] Conventions for the spelling of Anishinaabe words in this paper were created through workshops with a community language teacher (Ella Dawn Green), community researchers (Brennan Wapioke, Edward Mandamin, Roberta Greene), elders (Walter Redsky, Ella Dawn Green, Jimmy Redsky, Robin Greene), and myself. A final workshop took place 19 February 2005 when we all met with John Nichols, an Algonquian linguist, from the University of Minnesota. This workshop established the spelling conventions used in this paper.

[6] Scientific authorities can be found in Table 1.

[7] The folk generics presented in Table 1 show a high degree of correspondence with scientific species. In one case, ***ajidamowaanow***, the name was applied to two different species. In comparing the names reported in this study with those collected in the late 1800s and early 1900s in previous ethnobotanies, there is also a surprising degree of similarity. Variation can be accounted for by the large geographic spread (Wisconsin, Michigan, Minnesota, and Ontario) and a large temporal span (the late 1800s to the early 2000s) of these sources. The closest work geographically is Densmore's (1928) study, some of which was undertaken among the Rainy River Ojibway, in an area that lies 200 km southeast of Shoal Lake, while the most recent was that of Kenny and Parker (2004).

[8] In English this term is also complex. Medicine can refer to the pharmacopoeia of substances often called drugs or the science and art of treating and curing disease and sickness and improving or maintaining health. The class ***mashkiki*** probably includes plants that are known to be part of the pharmacopoeia (plants useful as medicine) as well as those plants that may play a role in the spiritual ceremonies that are central for restoring and maintaining health. In Anishinaabe thought all physical forms, including plants, hold the potential to become inhabited by a spiritual being. If all plants hold this potential, then none can be excluded from the ***mashkiki*** class; it also opens the possibility that other things such as ''grandfather stones,'' animals, and other physical forms may be included. This is an important distinction, since many ethnobotanical studies are interested in determining whether a plant is used as a medicine. However, depending upon how the term medicine is translated, the response may refer to the use of the plant as a drug or the use of the plant by a healer that transcends its functional properties.

[9] In the workshop (19 February 2005) with John Nichols we also discussed that basic rank taxa are nouns and in Ojibway can be considered to be either animate or inanimate. However, while linguists have noted that some nouns are always animate and others

inanimate, it is also possible for a noun to shift categories depending on the specific context of a sentence. Hallowell (1991) and Black (1977a, 1977b) provide a detailed discussion on this indeterminacy within Ojibway thought and grammar. Hallowell talks about the time he asked an elder whether a rock was a person (animate). The response was that some rocks were while some were not. It is often assumed that in Ojibway thought all things are animate, but that is an oversimplification of a more complex idea. Furthermore, as Taylor (1990) reports for the Tobelo, Iskatewizaagegan elders also recognize a male/female for every plant taxon. These two examples suggest that there are different categories for plant classification that we have not considered in this paper.

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APPENDIX 1.—Plants recorded during field research listed by order of scientific classification.[1]

Suprageneric taxon	Latin binomial	Iskatewizaagegan plant group	English common name
Fungi Kingdom (Fungae)			
Fungae	—	ozhashkwedow	fungi
Hymenochaetaceae	*Inonotus obliquus* (Ach. ex Pers.) Pil.	zagataagan	tinder fungus
Plant Kingdom (Plantae), non-flowering plants			
Bryophyta	—	aasaakamig	moss
Sphagnaceae	*Sphagnum* spp.	mashkiigikamig	sphagnum moss
Polypodiophyta	—	ginebigowazh/iin	ferns
Aspleniaceae	*Woodsia ilvensis* (L.) R. Br.	ajidamowaanow/an	rusty woodsia
Dryopteridaceae	*Matteuccia struthiopteris* (L.) Todaro.	gichianiibiish/an	ostrich fern
Polypodiaceae	*Polypodium virginianum* L.	[unnamed]	rock polypody fern
Pinophyta	—	[unnamed]	conifer
Cupressaceae	*Juniperus communis* L.	gaagagiwaandag/oog	common juniper
	Thuja occidentalis L.	giizhikaandag/oog	Eastern white cedar
Pinaceae	*Abies balsamea* (L.) P. Mill.	bigiiwaatig/oog	balsam fir
	Larix laricina (Du Roi) K. Koch	mashkiigwaatig/oon	tamarack; larch
	Picea glauca (Moench) Voss	mina'ig/oog	white spruce; highland spruce
	Picea mariana (Mill.) BSP	zesegaanaatig/oog	black spruce
	Pinus banksiana Lamb.	okikaandag	jack pine
	Pinus strobus L.	zhingwaak	white pine
	Pinus resinosa Ait.	gaazhooshkwanagizid zhingwaak	red pine; Norway pine
Taxaceae	*Taxus canadensis* Marsh.	niibaayaandag	Canada yew; ground hemlock
Plant Kingdom (Plantae), flowering plants			
Magnoliophyta/Magnoliopsida			
Aceraceae	*Acer negundo* L.	ziinzibaakwadwaatig/oog	Manitoba maple; box elder
Anacardiaceae	*Rhus radicans* L.	babiigobagoon	poison ivy
Apiaceae	*Cicuta maculata L.*	manidookaadaak/wog	water hemlock
	Osmorhiza longistylis (Torr.) DC.	zhiiwijiibik	long-styled sweet cicely
Araliaceae	*Aralia nudicaulis* L.	waaboozojiibik/an	wild sarsaparilla
Aristolochiaceae	*Asarum canadense* L.	namepin	wild ginger

APPENDIX 1.—Continued.

Suprageneric taxon	Latin binomial	Iskatewizaagegan plant group	English common name
Asteraceae	*Achillea millefolium* L.	[unnamed]	yarrow
	Artemisia frigida Willd. + *Artemisia* spp.	wiingwashk	sage
	Helianthus tuberosus L.	ogishkibwaak/wog	Jerusalem artichoke
Balsaminaceae	*Impatiens capensis* Meerb.	wiimbashk	spotted touch-me-not
Betulaceae	*Betula papyrifera* Marsh.	wiigwaasaatig/oog	paper birch
	Corylus cornuta Marsh.	bagaaniminzh/iig	beaked hazelnut
	Ostrya virginiana (Mill.) K. Koch	maananoons/ag	ironwood; hop-hornbeam
Cactaceae	*Opuntia fragilis* (Nutt.) Haw.	animozidens/an	little prickly pear cactus
Caprifoliaceae	*Viburnum trilobum* Marsh.	aniibiminaatig/oog	highbush cranberry
Cornaceae	*Cornus canadensis* L.	zhaashaagomin/an	bunchberry
	Cornus sericea L. syn. *C. stolonifera* Michx.	miskwaabiiminag/oog	red osier dogwood
Cucurbitaceae	*Cucurbita pepo* L.	agwisimaan/ag	pumpkin, squash
	Citrullus colocynthis (L.) Schrad.	agwisimaan/ag	watermelon
Ericaceae	*Gaultheria procumbens* L.	wiinisiibagoon	wintergreen; teaberry
	Ledum groenlandicum Oeder	mashkiigobag/oon	Labrador tea
	Vaccinium angustifolium Ait.	miinaatig/oog	low-bush blueberry; narrow-leaved blueberry
		makade-miin/an	black blueberry
		zhaabwaate-miin/an	transparent blueberry
	Vaccinium myrtilloides Michx.	bingomin/an	velvetleaf blueberry; high-bush blueberry
	Vaccinium oxycoccos L.	mashkiigomin/an	bog cranberry
Fagaceae	*Quercus macrocarpa* Michx.	mitigominzh/iig	bur oak
Grossulariaceae	*Ribes americanum* Miller	makominaatig/oog	wild black currant
	Ribes glandulosum Graver	miishijiiminaatig/oog	skunk currant
	Ribes lacustre (Pers.) Poiret.	amikominaatig/oog	black gooseberry; bristly black currant
	Ribes hirtellum L. syn. *R. oxyacanthoides* L.	ozhaaboominaatig/oog	northern gooseberry plant; bristly wild gooseberry plant

APPENDIX 1.—Continued.

Suprageneric taxon	Latin binomial	Iskatewizaagegan plant group	English common name
Lamiaceae	*Mentha arvensis* L.	gaadakaasing/in	Canada mint
Nymphaeaceae	*Nuphar variegatum* Engelm. and *Nymphaea tetragona* Georgi.	ogidibag/oon	small yellow pond-lily and white waterlily
Oleaceae	*Fraxinus nigra* Marsh.	aagimaatig/oog	black ash
Pyrolaceae	*Chimaphila umbellata* (L.) Bart.	gaagigebag/oon	prince's-pine; pipsissewa
	Pyrola sp.	[unnamed]	wintergreens
Ranunculaceae	*Actaea rubra* (Ait.) Willd.	manidoominaatig/oog	red baneberry
Rosaceae	*Amelanchier alnifolia* (Nutt.) Nutt. ex M. Roemer. and *Amelanchier* sp.	ozigwaakominaatig/oog	saskatoon berry
	Crataegus coccinea L.	miinensiwaatig/oon	scarlet hawthorn
	Fragaria vesca L. and *F. virginiana* Duchesne.	ode'iminaatig/oog	woodland and wild strawberry
	Prunus nigra Ait.	bagesaanaatig/oog	Canada plum
	Prunus pensylvanica L.f.	obwaayiminaatig/oon	pincherry
	Prunus pumila L.	nengaaminaatig/oog	sandcherry tree
	Prunus virginiana L. var. *virginiana*	osisaweminaatig/oog	chokecherry tree
	Rosa acicularis Lindley.	oginiiwaabigwanaatig/oog	prickly rose
	Rubus idaeus L. var. *strigosus* (Michx.) Maxim.	miskwaabiiminag/oog	wild red raspberry
	Rubus pubescens Raf.	oshkiinzhigoaatig/oog	dewberry plant
	Sorbus decora (Sarg.) C.K. Schneid	makwaminaatig/oog	showy mountain ash
Salicaceae	*Populus balsamifera* L.	maanazaadi/ig	black poplar
	Populus tremuloides Michx.	azaadi/iig	trembling aspen
	Salix bebbiana Sarg. + *Salix* sp.	wiigob/iig	Bebb willow + willows
Solanaceae	*Lycopersicon esculentum* Miller	ogin/iig	tomato
	Solanum tuberosum L.	opin/iin	potato
Ulmaceae	*Ulmus americana* L.	aniib	American elm
Urticaceae	*Urtica dioica* L.	mazaanishk/oog	stinging nettle

APPENDIX 1.—Continued.

Suprageneric taxon	Latin binomial	Iskatewizaagegan plant group	English common name
Magnoliophyta/Liliopsida			
Acoraceae	*Acorus americanus* (Raf.) Raf.	wiike	sweet flag
Cyperaceae	*Carex aquatilis* Wahl.	nabagishkoon	water sedge
	Schoenoplectus acutus (Muhl. ex Bigelow) A. + D. Löve	gichigamiiwashk/oon	great bulrush
Liliaceae	*Allium stellatum* Fraser	zhigaagominzh/iig	pink-flowered onion
	Clintonia borealis (Ait.) Raf.	manidoominaatig/oog	blue-bead lily
Orchidaceae	*Cypripedium* spp.	[unnamed]	lady's slippers
Poaceae	*Hierochloe odorata* (L.) Beauv.	mishkosiiwiingoshk	sweet grass
	Hordeum jubatum L.	ajidamowaanow/an	foxtail barley
	Zea mays L.	mndaamin/ag	corn
	Zizania aquatica L.	manoomin	wild rice
Typhaceae	*Typha latifolia* L.	biiweshkanag	cattail

[1] Scientific nomenclature follows treatment by Marles et al. (2000) where possible. If plant not included in Marles et al. (2000), then Farrar (1995), Soper and Heimburger (1982), Newmaster et al. (1998), or Gleason and Cronquist (1991) followed in the preceding order.