Greetings,

The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and the Invasive Plant Association of Wisconsin (IPAW) seek your help in developing and prioritizing a list of non-native invasive plants that threaten native plant communities in Wisconsin. Although similar lists have been developed previously, it is not always clear how they were derived and how independent they are.

Our objective is to develop a prioritized list that ranks each species from a *consistent set of ecological criteria and methods*. Our approach is adapted from the *Alien Plant Ranking System* (Hiebert, R.D. and J. Stubbendieck. 1993. Handbook for ranking exotic plants for management and control. USDI National Park Service Natural Resources Report NPS/NRMWRO/NRR-93/08. 31pp.). Because quantitative data are lacking for many invasive species, we are supplementing existing data with expert opinion to derive a database that can be ranked by several relevant (or site-specific) factors. This survey is designed to solicit first-hand knowledge from professionals in the field.

Many of you are familiar with the concept of developing an "index of conservatism" for native plants by averaging the opinions of a panel of experts. Similarly, the median responses from this survey will be calculated and combined with data derived from published literature and plant databases to develop an "index of invasiveness".

The results of this effort, along with the database we develop, will be made available at GLIFWC's web site . Although our focus is Wisconsin, we expect the results of this effort will have wider regional applications depending on the response rate from neighboring states. Some of the potential uses of these data include:

1. formulating policy
2. information and education outreach
3. prioritizing management efforts
4. justifying management efforts
5. identifying knowledge gaps
6. discerning large-scale spatial patterns

Attached is a survey form that asks you to rate several attributes and impacts for each plant. **Please limit your responses to only those species with which you have personal experience**. We have started with a comprehensive list comprised of the U.S. Forest Service's list of invasive plants for the Eastern Region and the University of Wisconsin Herbarium's list of ecologically invasive plants (nomenclature follows Gleason and Cronquist 1991). If you are aware of other problem species not included on the list, please add them in the spaces provided. Similarly, if you disagree with the listing of a species, please note that too.

You will need the acrobat reader to print out the survey. It can be downloaded for free at: http://www.adobe.com/products/acrobat/readstep.html. We would appreciate receiving your response by 30 March 2002 at the address listed below:

Invasive Plant Survey
Great Lakes Indian Fish & Wildlife Commission
P.O. Box 9
Odanah, WI 54861
ATTN: Miles Falck

Thank you for your cooperation in this effort. If you have questions pertaining to this survey, please forward them to Miles Falck at (715) 682-6619 or miles@glifwc.org.

Sincerely,

Miles Falck, Wildlife Biologist
Great Lakes Indian Fish & Wildlife Commission

Eric Parker & Heather Patti, Co-Chairs, Science Committee
Invasive Plant Association of Wisconsin

PERSONAL DATA:

Name: _____ Mailing Address: _____

Position: _____ _____

Affiliation: _____ Phone: _____

Email: _____

Geographic Work Area:

State: _____

Counties: _____

COMMENTS: (e.g. emerging invasive species, successful control methods, research questions, etc.)

SURVEY INSTRUCTIONS: Please use this page as a guide for filling out the survey. Limit your responses to only those species you are familiar with. If you are unsure of one of the categories below for a given species, leave it blank.

Ecoregion - Refer to the map and record the ecoregion(s) where you have observed this plant..

Habitat - Plant community most often invaded (record all that apply)

A	aquatic
B	barrens
G	grasslands
F	forests
W	wetlands
D	disturbed ground

Disturbance - This plant is found:

0	only in sites disturbed within the last 3 years
5	in sites disturbed within the last 10 years
10	in mid-successional sites disturbed 11-50 years before present (BP)
15	in late-successional sites disturbed 51-100 years BP
20	in high-quality natural areas with no known major disturbance in the last 100 years

Abundance - Within my geographic work area, this plant occurs:

0	in <10% of vulnerable sites
5	in 10-25% of vulnerable sites
10	in 25-50% of vulnerable sites
15	in >50% of vulnerable sites

Impact - At sites where it occurs, this plant

0	has little or no ecological impact
5	invades and modifies native communities
10	invades and replaces native communities

Competition - Observed ability of the plant to compete for limiting resources

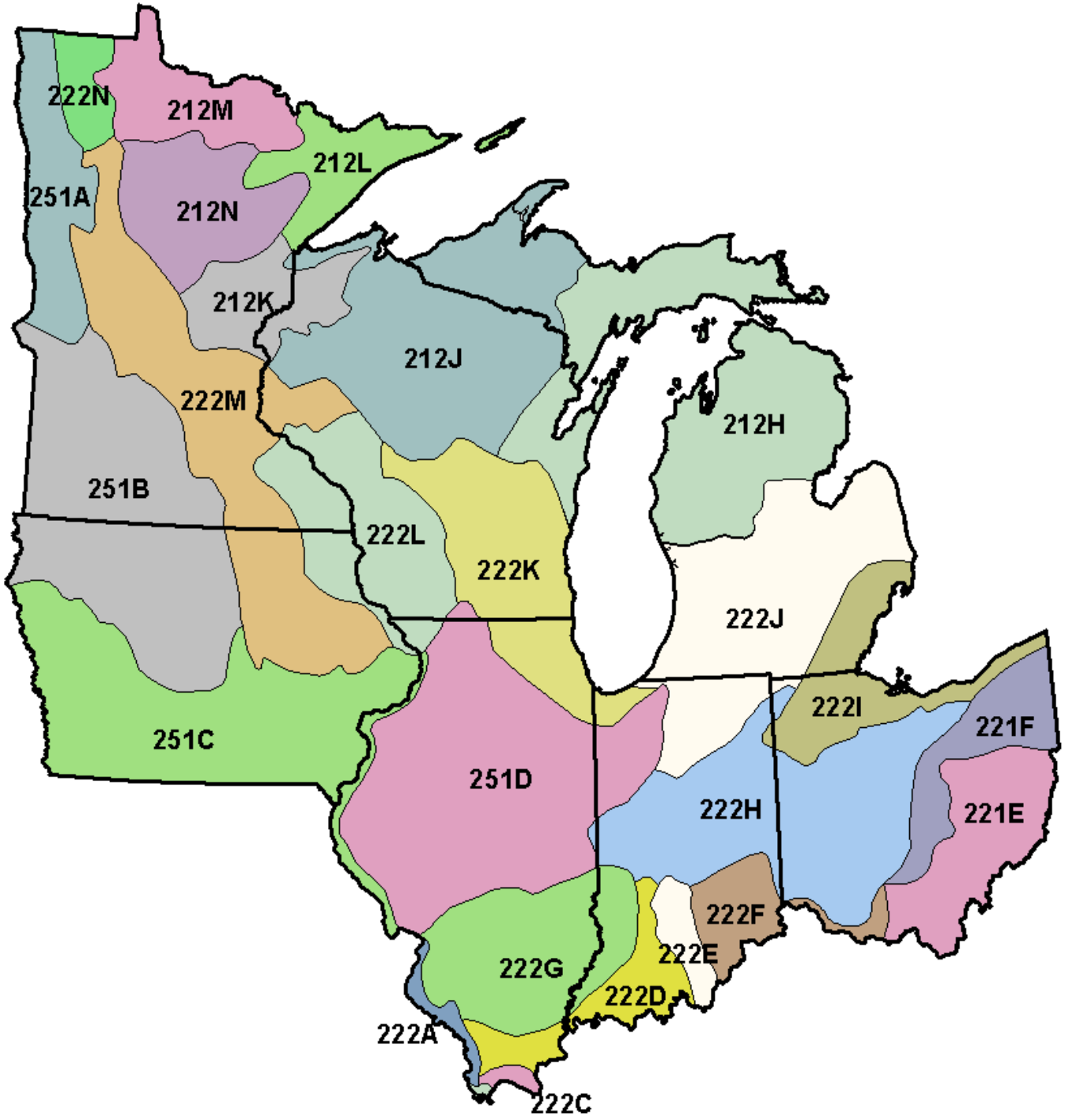
0	poor competitor
5	moderate competitor
10	highly competitive

Rate of Spread - Within the last 5 years, this plant's population has

0	decreased
5	remained the same
10	increased slightly
15	more than doubled

Control - Feasibility of effective long term control

0	None required, plant will lose vigor as succession proceeds
5	One time management application
10	Periodic management required (every 5-10 years)
15	Requires annual management
20	No feasible control option


222N
212M
212L
251A
212N
212K
212J
222M
212H
251B
222L
222K
222J
222I
221F
251C
251D
222H
221E
222F
222E
222G
222D
222A
222C

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Abutilon	theophrasti	Velvet leaf								
Acer	ginnala	Amur maple								
Acer	palmatum	Japanese maple								
Acer	platanoides	Norway maple								
Acer	pseudoplatanus	Sycamore maple								
Achillea	millefolium var. millefolium	Common yarrow								
Actinidia	arguta	Bower Actinidia, Tara vine								
Aegopodium	podagraria	Goutweed								
Agrostis	stolonifera	Redtop								
Ailanthus	altissima	Tree of heaven								
Aira	caryophyllea	Silver hairgrass								
Ajuga	reptans	Carpet bugle								
Akebia	quinata	Akebia, five-leaf Akebia								
Alliaria	petiolata	Garlic mustard								
Allium	vineale	Wild garlic								
Alnus	glutinosa	Black alder								
Amaranthus	hybridus	Green amaranthus								
Amaranthus	retroflexus	Pigweed								
Ampelamus	albidus	Sandvine								
Ampelopsis	brevipedunculata	Porcelain berry								
Angelica	sylvestris	Woodland angelica								
Anthoxanthum	odoratum	Sweet vernal grass								
Anthriscus	sylvestris	Wild chervil								
Aralia	elata	Hercules' club								
Arctium	minus	Common burdock								
Arctium	vulgare	Woodland burdock								
Arenaria	serpyllifolia	Thyme-leaf sandwort								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Arrhenatherum	elatius	Tall oatgrass								
Artemisia	absinthium	Common wormwood								
Arthraxon	hispidus	Small carpgrass								
Aruncus	dioicus	Goat's beard								
Asparagus	officinalis	Asparagus								
Berberis	thunbergii	Japanese barberry								
Berberis	vulgaris	Common barberry								
Berteroa	incana	Hoary alyssum								
Betula	pendula	Weeping birch								
Bothriochloa	bladhii	Eurasian bluestem								
Bromus	inermis	Smooth brome								
Bromus	japonicus	Japanese brome								
Bromus	squarrosus	Corn brome, downy brome,								
Bromus	tectorum	Downy chess, drooping brome								
Butomus	umbellatus	Flowering rush								
Cabomba	caroliniana	Fanwort, Carolina water shield								
Calamagrostis	epigejos	Feathertop								
Callitriche	stagnalis	European water-starwort								
Campanula	rapunculoides	Creeping bellflower								
Cannabis	sativa	Hemp								
Capsella	bursa-pastoris	Shepard's purse								
Caragana	arborescens	Pea-tree, Siberian pea shrub								
Cardamine	impatiens	Bushy rock cress								
Cardamine	pratensis var. pratensis	Cookoo-flower								
Carduus	acanthoides	Plumeless thistle								
Carduus	nutans	Musk thistle								
Carex	kobomugi	Asiatic sedge								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Celastrus	orbiculatus	Asiatic bittersweet, Oriental								
Centaurea	cyanus	Bachelor's buttons								
Centaurea	diffusa	Diffuse knapweed								
Centaurea	maculosa (= biebersteinii)	Spotted knapweed, bachelors								
Centaurea	repens	Russian knapweed								
Centaurea	solstitialis	Yellow star-thistle								
Cerastium	vulgatum (= fontanum)	Mouse-ear chickweed								
Chelidonium	majus	Greater celandine								
Chloris	verticillata	Windmill grass								
Chrysanthemum	leucanthemum	Ox-eye daisy								
Cichorium	intybus	Chicory								
Cirsium	arvense	Canada thistle								
Cirsium	palustre	Marsh thistle								
Cirsium	vulgare	Bull thistle								
Clematis	terniflora	Yam-leaved Clematis								
Commelina	communis	Dayflower								
Conium	maculatum	Poison hemlock								
Convallaria	majalis	European lily of the valley								
Convolvulus	arvensis	Field-bindweed								
Cornus	drummondii	Roughleaf dogwood								
Coronilla	varia	Crown vetch								
Corynephorus	canescens	Silvergrass								
Crassula	helmsii	Australian stonecrop								
Crepis	tectorum	Hawksbeard								
Cynoglossum	officinale	Hound’s tongue								
Cytisus	scoparius	Scotch broom								
Dactylis	glomerata	Orchard-grass								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Datura	stramonium	Jimsonweed								
Daucus	carota	Queen Anne's lace								
Deschampsia	cespitosa var. parviflora	Small-flowered tickle grass								
Dianthus	armeria	Deptford pink								
Digitalis	lanata	Grecian foxglove								
Digitalis	purpurea	Common foxglove								
Dioscorea	batatas	Cinnamon vine								
Dipsacus	fullonium (= fullonum ssp.	Fullers' teasel								
Dipsacus	laciniatus	Cut-leaved teasel								
Dipsacus	sylvestris(= fullonum ssp.	Wild teasel, common teasel								
Echinochloa	crusgalli	Barnyard- grass								
Echium	vulgare	Viper's bugloss								
Egeria	densa	Brazilian water weed								
Elaeagnus	angustifolia	Russian olive								
Elaeagnus	umbellata	Autumn olive								
Elsholtzia	ciliata	Elsholtzia								
Elytrigia (Agropyron)	repens	Quackgrass								
Epilobium	hirsutum	Hairy willow herb								
Epipactis	helleborine	Helleborine								
Eragrostis	curvula	African weeping lovegrass								
Euonymus	alatus	Winged Euonymus, winged								
Euonymus	fortunei	Wintercreeper, climbing								
Euphorbia	cyparissias	Cypress spurge								
Euphorbia	esula	Leafy spurge, wolf's milk								
Festuca	elatior (= arundinacea)	Tall fescue								
Festuca	ovina (= trachyphylla)	Sheep fescue								
Festuca	pratensis	Meadow-fescue								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Filipendula	ulmaria	Queen of the meadow								
Froelichia	gracilis	Cottonweed								
Fumaria	officinalis	Fumitory								
Galeopsis	tetrahit	Hemp-nettle								
Galinsoga	quadriradiata	Quickweed								
Galium	mollugo	Wild madder, white bedstraw								
Galium	verum	Yellow bedstraw								
Geranium	nepalense	Sweet Nepalese crane's bill								
Glaucium	flavum	Horned poppy								
Glechoma	hederacea	Gill over the ground								
Glyceria	maxima	Tall mannagrass, English water								
Gypsophila	paniculata	Baby's breath								
Hedera	helix	English ivy								
Hemerocallis	fulva	Orange day-lily								
Heracleum	mantegazzianum	Giant hogweed								
Hesperis	matronalis	Dame's rocket								
Hieracium	aurantiacum	Orange hawkweed								
Hieracium	lachenalii	Hawkweed								
Hieracium	piloselloides	Glaucus king-devil, yellow								
Hieracium	x atramentarium	Hawkweed								
Humulus	japonicus	Japanese hops								
Humulus	lupulus var. lupulus	Hops								
Hydrilla	verticillata	Hydrilla								
Hydrocharis	morsus-ranae	European frogbit								
Hygrophylla	polysperma	Miramar-weed								
Hypericum	perforatum	St. John's wort								
Ilex	crenata	Japanese holly								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Impatiens	glandulifera	Purple jewelweed								
Iris	pseudacorus	Yellow Iris								
Knautia	arvensis	Blue-buttons								
Kochia	scoparia	Summer cypress								
Lactuca	serriola	Prickly lettuce								
Lagarosyphon	major	African oxygen-weed								
Lamium	galeobdolon	Yellow dead nettle								
Lamium	maculatum	Red dead nettle								
Lapsana	communis	Nipplewort								
Lathyrus	latifolius	Everlasting pea								
Lathyrus	sylvestris	Everlasting pea								
Leontodon	autumnalis	Fall dandelion								
Leonurus	cardiaca	Motherwort								
Lepidium	latifolium	Tall pepperwort								
Lespedeza	cuneata	Chinese Lespedeza								
Lespedeza	stipulacea	Korean clover								
Lespedeza	striata	Bush clover								
Leucojum	aestivum	Summer snowflake								
Ligustrum	obtusifolium	Amur river privet								
Ligustrum	vulgare	European privet								
Linaria	dalmatica	Dalmatian toadflax								
Linaria	vulgaris	Butter and eggs								
Lolium	perenne	Rye grass								
Lonicera	japonica	Japanese honeysuckle								
Lonicera	maackii	Amur honeysuckle								
Lonicera	morrowii	Fly honeysuckle, Morrow								
Lonicera	tatarica	Tartarian honeysuckle								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Lonicera	x bella	Bell's honeysuckle								
Lonicera	xylosteum	European fly honeysuckle								
Lotus	corniculatus	Bird's-foot trefoil								
Ludwigia	peploides	Creeping primrose								
Lunaria	annua	Money plant honesty								
Lunaria	rediviva	Money plant, perennial honesty								
Lupinus	polyphyllus	Lupine								
Lychnis	flos-cuculi	Ragged robin								
Lysimachia	nummularia	Moneywort								
Lysimachia	vulgaris	Garden-loosestrife								
Lythrum	salicaria	Purple loosestrife								
Maclura	pomifera	Osage orange								
Malva	moschata	Musk-mallow								
Malva	neglecta	Common mallow								
Marsilea	quadifolia	Water clover, water shamrock								
Matricaria	matricarioides (= discoidea)	Pineapple-weed								
Medicago	sativa	Black medic								
Melilotus	alba	White sweet clover								
Melilotus	officinalis	Yellow sweet clover								
Mentha	aquatica	Water mint								
Mentha	x gentilis	Scotch mint								
Mentha	spicata	Spearmint								
Mentha	x piperita	Peppermint								
Microstegium	vimineum	Japanese stilt grass								
Miscanthus	sacchariflorus	Amur silver-grass								
Miscanthus	sinensis	Eulalia								
Morus	alba	White mulberry								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Myosotis	scorpioides	Forget me not								
Myosotis	sylvatica	Garden forget me not								
Myriophyllum	aquaticum	Parrotfeather								
Myriophyllum	spicatum	Eurasian water milfoil								
Najas	minor	Naiad								
Nepeta	cataria	Catnip								
Nymphoides	peltata	Yellow floating heart								
Onopordum	acanthium	Scotch thistle								
Ornithogalum	umbellatum	Star of Bethlehem								
Pachysandra	terminalis	Pachysandra								
Panicum	amarum	Beach-grass								
Pastinaca	sativa	Wild parsnip								
Paulownia	tomentosa	Empress-tree								
Penstemon	digitalis	False foxglove								
Perilla	frutescens	Perilla								
Phalaris	arundinacea	Reed canary grass								
Phalaris	canariensis	Annual canary grass								
Phellodendron	japonicum	Japanese cork tree								
Phleum	pratense	Timothy								
Phragmites	australis	Common reed grass								
Phyllostachys	sp.	Oriental bamboo								
Picris	hieracioides ssp. hieracioides	Ox-tongue								
Pinus	sylvestris	Scotch pine								
Pinus	thunbergiana	Japanese black pine								
Pinus	virginiana	Virginia pine								
Plantago	lanceolata	Lance-leaved plantain								
Plantago	major	Plantain								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Poa	annua	Annual bluegrass								
Poa	bulbosa	Bulbous bluegrass								
Poa	compressa	Wiregrass, Canada bluegrass								
Poa	pratensis	Kentucky bluegrass								
Polygonum	aubertii	Silver lace vine								
Polygonum	cespitosum	A smartweed								
Polygonum	cuspidatum	Japanese knotweed								
Polygonum	perfoliatum	Mile-a-minute vine								
Polygonum	sachalinense	Giant knotweed								
Populus	alba	White poplar								
Potamogeton	crispus	Curly pondweed								
Potentilla	argentea	Silvery cinquefoil								
Potentilla	recta	Sulphur cinquefoil								
Prunella	vulgaris var. vulgaris	Heal-all								
Prunus	avium	Sweet cherry								
Prunus	mahaleb	Perfumed cherry								
Pueraria	lobata	Kudzu								
Quercus	robur	English oak								
Ranunculus	acris	Tall buttercup								
Ranunculus	ficaria	Lesser celandine								
Ranunculus	repens	Creeping buttercup								
Rhamnus	cathartica	Common buckthorn								
Rhamnus	davurica	Dahurian buckthorn								
Rhamnus	frangula	Smooth buckthorn								
Rhodotypos	scandens	Black jet-bead								
Ribes	sativum (= rubrum)	Garden red currant								
Robinia	hispida	Rose-acacia								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Robinia	pseudoacacia	Black locust								
Rorippa	amphibia	Great water cress								
Rorippa (= Nasturtium)	microphylla (= officinale)	Watercress								
Rorippa (= Nasturtium)	nasturtium-aquaticum (=	Watercress								
Rosa	eglanteria	Eglantine, sweetbriar								
Rosa	multiflora	Multiflora rose								
Rosa	rugosa	Beach rose								
Rubus	phoenicolasius	Wineberry								
Rumex	acetosella	Sheep sorrell								
Rumex	crispus	Curly dock								
Rumex	obtusifolius	Bitter dock								
Salix	alba	White willow								
Salix	babylonica	Weeping willow								
Salix	fragilis	Crack willow								
Salvinia	molesta	Kariba-weed								
Saponaria	officinalis	Soapwort								
Saururus	cernuus	Lizard's tail								
Sedum	acre	Yellow sedum								
Sedum	purpureum (= telephium)	Live forever								
Senecio	jacobaea	Tansy- ragwort								
Senecio	vulgaris	Common groundsel								
Setaria	glauca (= 'pumila)	Yellow foxtail								
Silene	latifolia	White campion								
Silene	vulgaris	Bladder campion								
Solanum	dulcamara	Climbing nightshade								
Sonchus	arvensis	Field sow thistle, perennial sow								
Sonchus	asper	Prickly sow thistle								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Sonchus	oleraceus	Common sow thistle								
Sonchus	palustris	Marsh sow thistle								
Sorbaria	sorbifolia	False Spiraea								
Sorbus	aucuparia	Eurasian mountain ash								
Sorghum	halepense	Johnson grass								
Spiraea	japonica	Japanese spiraea								
Spiraea	prunifolia	Bridal-wreath spirea								
Stellaria	aquatica	Giant chickweed								
Stellaria	graminea	Common stitchwort								
Tanacetum	vulgare	Tansy								
Taraxacum	officinale	Common dandelion								
Taxus	cuspidata	Japanese yew								
Thlaspi	arvense	Field pennycress								
Thymus	pulegioides	Wild thyme								
Thymus	serpyllum	Thyme								
Torilis	arvensis	Field hedge-parsley								
Torilis	japonica	Japanese hedge-parsley								
Tragopogon	pratensis	Yellow goat's beard								
Trapa	natans	Water chestnut								
Trifolium	pratense	Red clover								
Trifolium	repens	White clover								
Tussilago	farfara	Colt's-foot								
Typha	angustifolia	Narrow-leaved cattail								
Typha	x glauca	Hybrid cattail, white cattail								
Ulmus	parvifolia	Chinese elm								
Ulmus	pumila	Siberian elm								
Urtica	dioica var. dioica	Stinging nettle								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Valeriana	officinalis	Garden-heliotrope								
Verbascum	blattaria	Moth-muellin								
Verbascum	thapsus	Giant muellin								
Veronica	officinalis	Speedwell								
Viburnum	dilatatum	Viburnum								
Viburnum	lantana	Wayfaring tree								
Viburnum	opulus var. opulus	European cranberry bush								
Viburnum	plicatum	Japanese snowball								
Viburnum	sieboldii	Japanese viburnum								
Vicia	cracca	Cow vetch								
Vicia	villosa	Hairy vetch								
Vinca	minor	Greater periwinkle								
Vincetoxicum	nigrum	Black swallow wort								
Vincetoxicum (= Cynanchum)	rossicum	Dog-strangling vine, swallow								
Wisteria	floribunda	Japanese wisteria								
Wisteria	sinensis	Chinese wisteria								
Native Plants										
Acer	negundo	Box elder								
Amorpha	fruticosa	False indigo								
Bidens	aristosa	Midwestern tickseed-sunflower								
Cornus	amomum (= olbiqua var.	Silky dogwood								
Cornus	racemosa	Gray dogwood								
Cornus	sericea	Red osier dogwood								
Cycloloma	atriplicifolium	Winged pigweed								
Gleditsia	triacanthos	Yellow locust, honey locust								

Genus	Species	Common Name	Ecoregion	Habitat	Disturbance	Abundance	Impact	Competition	Rate of Spread	Control
Helianthus	tuberosus	Jerusalem artichoke								
Hieracium	kalmii (= canadensis)	Canada hawkweed								
Juniperus	virginiana	Red-cedar								
Mirabilis	nyctaginea	Heart-leaved umbrella-wort								
Myriophyllum	excalbescens	Water-milfoil								
Myriophyllum	heterophyllum	Water-milfoil								
Najas	guadalupensis	Southern water-nymph								
Phalaris	aurundinacea	Reed canary grass								
Phragmites	australis	Common reed grass								
Physocarpus	opulifolius	Ninebark								
Podophyllum	peltatum	May-apple								
Populus	grandidentata	Large-toothed aspen								
Populus	tremuloides	Quaking aspen								
Rhus	glabra	Smooth sumac								
Rudbeckia	hirta	Black-eyed Susan								
Solanum	nigrum	Black nightshade								
Typha	latifolia	Broad-leaved cat-tail								
Xanthium	strumarium	Common cocklebur								