# **Appendix A - Lake Kegonsa Plant Statistics 2024**

Table 1: 2024 Aquatic Plant Community Statistics, Lake Kegonsa, Dane County, WI

Total number of sites visited	556				
Total number of sites with vegetation					
Total number of sites shallower than maximum depth of plants	439				
Frequency of occurrence at sites shallower than maximum depth of plants	74.9				
Simpson Diversity Index	0.81				
Maximum depth of plants (ft)**	12.5				
Number of sites sampled using rake on Rope (R)					
Number of sites sampled using rake on Pole (P)					
Average number of all species per site (shallower than max depth)	0.71				
Average number of all species per site (veg. sites only)	1.35				
Average number of native species per site (shallower than max depth)					
Average number of native species per site (veg. sites only)	1.17				
Species Richness	11*				
Species Richness (including visuals)	11*				
*Filamentous algae is no longer included in species richness by WI DNR					

Table 2: Historical Aquatic Plant Community Statistics, Lake Kegonsa, Dane County, WI

	1991	2006	2011	2017	2024
F.o.o. at sites shallower than maximum depth of plants		45.48	58.87	42.93	74.49
Most Dominant Species	Eurasian Water-milfoil	Eurasian Water- milfoil	Horned Pondweed	Wild Celery	Chara
	Coontail	Coontail	Eurasian Water- milfoil	Coontail	Coontail
	Sago Pondweed	Sago Pondweed	Coontail	Eurasian Water-milfoil	Wild celery
	Curly-leaf	Leafy Pondweed	Flat-stem	Filamentous	Eurasian
	Pondweed		Pondweed	Algae	Water-milfoil
	Water	Filamentous Wild Colony		Water Star-	Leafy
	Stargrass Algae Wild Celery		grass	Pondweed	
Maximum Depth of Plants	9.8	9	8	12	12.5
Species Richness	5	11	8	10	11
Community FQI	6.93	14.33	12.66	13.79	15.49
Average Coefficient of Conservatism	4.00	4.78	5.17	4.88	4.9

Table 3: 2024 Aquatic Plant Taxa-Specific Statistics, Lake Kegonsa, Dane County, WI

Species	Frequency of occurrence within	Frequency of occurrence at sites shallower than	Relative Frequency	Number of sites where	Average rake fullness							
	vegetated areas (%)	maximum depth of plants	(%)	species	Tulliless							
Myriophyllum spicatum, Eurasian water milfoil	25.08	18.68	13.8	82	1.00							
Ceratophyllum demersum, Coontail	37.92	28.25	20.9	124	1.15							
Chara sp., Muskgrasses	53.52	39.86	29.5	175	1.06							
Elodea canadensis, Common waterweed	6.42	4.78	3.5	21	1.00							
Heteranthera dubia, Water star-grass	4.89	3.64	2.7	16	1.0							
Potamogeton foliosus, Leafy pondweed	18.96	14.12	10.4	62	1.00							
Potamogeton richardsonii, Clasping-leaf pondweed	2.45	1.82	1.3	8	1.00							
Stuckenia pectinata, Sago pondweed	4.28	3.19	2.4	14	1.00							
Vallisneria americana, Wild celery	27.52	20.50	15.2	90	1.12							
Lemna minor, Small duckweed	0.31	0.23	0	1	1.00							
Lemna trisulca, Forked duckweed	0.31	0.23	0	1	1.00							
Filamentous algae	9.79	7.29	*	32	1.00							
*Relative frequency of Filamentous	algae is no long	ger calculated by WI DN	IR		*Relative frequency of Filamentous algae is no longer calculated by WI DNR							

Table 4: Historical Floristic Quality Index, Lake Kegonsa, Dane County, WI

### **Coefficient of Conservatism**

Genus	Species	Common Name	1990	1991	2006	2011	2017	2024
Ceratophyllum	demersum	Coontail	3	3	3	3	3	3
Chara	Sp.	Muskgrass					7	7
Elodea	canadensis	Common waterweed 3 3		3	3			
Heteranthera	dubia	Water star-grass	ter star-grass 6 6 6		6	6		
Lemna	minor	Small duckweed			4			4
Potamogeton	foliosus	Leafy pondweed			6		6	6
Potamogeton	richardsonii	Clasping-leaf pondweed			5		5	5
Potamogeton	zosteriformis	Flat-stem pondweed				6		
Stuckenia	pectinata	Sago pondweed	3	3	3		3	3
Vallisnera	americana	Wild celery			6	6	6	6
Zannichellia	palustris	Horned pondweed			7	7		
Lemna	Trisulca	Forked duckweed						6
	•	Total Species	2	3	9	6	8	10
		Mean C Floristic Quality Index	3.00	4.00	4.78	5.17	4.88	4.9
		(FQI)	4.24	6.93	14.33	12.66	13.79	15.49

Please note: There is no Coefficient of Conservatism for exotic species such as Eurasian Watermilfoil or for species not identified to the species level (*Sagittaria sp.*).

### **Coefficient of Conservatism**

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- 0-3 taxa found in wide variety of plant communities and very tolerant of disturbance.
  - 4-6 taxa typically associated with specific plant communities and tolerate moderate disturbance.
- 7-8 taxa found in narrow range of plant communities and tolerate minor disturbance.
  - 9-10 taxa restricted to a narrow range of synecological conditions, with low tolerance of disturbance.

Table 5: Historical Aquatic Plant Occurrences, Lake Kegonsa, Dane County, Wisconsin.

Genus	Species	Common Name	% Rela				
			Occurrence				
			1991	2006	2011	2017	2024
Algae	sp.	Filamentous algae		8.7		***	***
Ceratophyllum	demersum	Coontail	9.5	19.5	14.0	25.6	20.9
Chara	sp.	Muskgrass				4.1	29.5
Elodea	canadensis	Common waterweed		7.8	5.6	6.5	3.5
Heteranthera	dubia	Water star-grass	1*	8.1	4.0	9.9	2.7
Lemna	minor	Small duckweed		0**			0.2
Myriophyllum	spicatum	Eurasian watermilfoil	82.5	22.2	22.4	18.8	13.8
Potamogeton	crispus	Curly-leaf pondweed	2*		1.2		
Potamogeton	foliosus	Leafy pondweed		12.3		3.8	10.4
Potamogeton	richardsonii	Clasping-leaf		0.6 1.7	0.6 1.7	1.3	
		pondweed		0.0		1.7	
Potamogeton	zosteriformis	Flat-stem pondweed			9.3		
Stuckenia	pectinata	Sago pondweed	6*	14.7		3.8	2.4
Vallisnera	americana	Wild celery		1.8	8.4	25.9	15.2
Zannichellia	palustris	Horned pondweed		4.2	35.1		
Lemna	trisulca	Forked duckweed					0.2
* - Data estimated from Figure 6, 2006 Lake Kegonsa Aquatic Plant Management Plan							
** - Species was sampled visually only, statistical data was not produced.							
*** - F.O.O. no longer	*** - F.O.O. no longer calculated by WI DNR						

### Wisconsin Invasive Species Laws (NR 40)

**Inspect** your boat, trailer and equipment.

**Remove** any attached aquatic plants or animals (before launching, after loading & before transporting on a public highway)

**Never Move** live fish away from a waterbody.\* Fish out of water are not considered live. Transport on ice is legal and recommended.

**Buy** minnows from a Wisconsin bait dealer and use leftover minnows only under certain conditions. \*

\*You may take leftover minnows purchased from a Wisconsin bait dealer away from any state water and use them again on that same water. You may use leftover minnows on other waters only if no lake or river water, or other fish were added to their container. See fishingwisconsin.org for more information.

#### **Minnows**

You may take live minnows purchased from a Wisconsin bait dealer (which includes Wisconsin registered fish farms) away from a waterbody if any of the following three conditions are met:

- Anglers can take purchased minnows away from a lake and use them again on that same waterbody.
- Anglers can also take purchased minnows away from a waterbody and use them elsewhere if no lake or river water or other fish were added to the bait container.
- Anglers can also take purchased minnows away from a waterbody for use elsewhere if they intend to preserve them as dead bait using approved methods.

In each of these cases minnows may be transported in the amount of water needed to keep the minnows alive, up to 2 gallons. No other fish may be held in the minnow container.

## **Additional Dane County Prevention Steps**

- Dane County staff will remove all vegetation, mud, and other debris that is accessible from the
  machines before moving them away from any waterbody. (Machines include boats, harvesters, barges,
  and elevators)
- Dane County staff will remove the machines from a waterbody for a minimum of five dry days before moving them to another waterbody.
- When it is not possible to wait for 5 days Dane County staff will use a 2% Virkon solution mixed no more than seven days prior to application and allowing 10 minutes of contact time before rinsing with hot water to disinfect the machines before moving to another waterbody.
- Dane County staff will try to plan to move only downstream when working in the Yahara river chain as an added layer of protection
- Per Wisconsin DNR protocol found here: http://dnr.wi.gov/topic/Invasives/disinfection.html

# **Appendix D - Mapped Plant Distributions for Lake Kegonsa**

Filamentous algae not included in total species maps



























