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 | 327 |
| 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) | 121 |
| Number of sites sampled using rake on Pole (P) | 434 |
| 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) | 1.82 |
| 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 Coontail | | Eurasian Water-milfoil | Wild celery | | |
| | Curly-leaf Pondweed | Leafy Pondweed | Flat-stem Pondweed | Filamentous Algae | Eurasian Water-milfoil | |
| | Water Stargrass | Filamentous Algae | Wild Celery | Water Star- grass | Leafy 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 vegetated areas (%) | Frequency of occurrence at sites shallower than maximum depth of plants | Relative Frequency (%) | Number of sites where species found | Average rake fullness | | |
|--|--|---|------------------------------|---|-----------------------------|--|--|
| 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 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 | | 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

С

- 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 | % Relative Frequency of | | | | |
|---|---------------------|-----------------------|-------------------------|---------|------|------|------|
| | | | 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 | 1.7 | | 1.3 |
| | | pondweed | | | | 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 | calculated by WI DN | R | | | | | |

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



























