

APPENDIX A – FISH LAKE PLANT STATISTICS (2012)

Table 1: 2012 Aquatic Plant Community Statistics, Fish Lake, Dane County, WI	
Aquatic Plant Community Statistics	2012
Number of sites sampled	474
Number of sites with vegetation	108
Number of sites shallower than maximum depth of plants	238
Frequency of occurrence at sites shallower than maximum depth of plants	45.38%
Simpson Diversity Index	0.83
Maximum Depth of Plants (Feet)	13
Taxonomic Richness (Number Taxa)	6
Average Number of Species per Site (less than max depth of plant growth)	0.65
Average Number of Species per Site (sites with vegetation)	1.43
Average Number of Native Species per Site (less than max depth of plant growth)	0.29
Average Number of Native Species per Site (sites with vegetation)	1.03

Table 2: 2012 Aquatic Plant Taxa-Specific Statistics, Fish Lake, Dane County, WI					
Species	Frequency of Occurrence within vegetated areas	Frequency of Occurrence at Site Shallower Than Max Depth of Plants	Percent Relative Frequency of Occurrence	Number of Intercept Points Where Detected	Average Density
Watershield	0.93	0.42	0.6	1	1.00
Coontail	59.26	26.89	41.6	64	1.00
Eurasian watermilfoil	78.7	35.71	55.2	85	2.00
White water lily	0.93	0.42	0.6	1	1.00
Curly-leaf pondweed	0.93	0.42	0.6	1	1.00
Floating-leaf pondweed	1.85	0.84	1.3	2	1.00

Table 3: Historical and 2012 Floristic Quality Index, Fish Lake, Dane County, WI

Coefficient of Conservatism

Genus	Species	Common Name	2006	2007	2012
<i>Brasenia</i>	<i>scherberi</i>	Watershield	6	6	6
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	3	3	3
<i>Nymphaea</i>	<i>odorata</i>	White water lily	---	6	6
<i>Polygonum</i>	<i>amphibium</i>	Water smartweed*	---	5	---
<i>Potamogeton</i>	<i>amplifolius</i>	Large-leaf pondweed*	---	7	---
<i>Potamogeton</i>	<i>natans</i>	Floating-leaf pondweed	---	5	5
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	---	3	---
Total Species			2	7	4
Mean C			4.50	5.00	5.00
Floristic Quality Index (FQI)			6.36	13.23	10.00

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.).

* Species was visually noted only

Coefficient of Conservatism (C)

- 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.

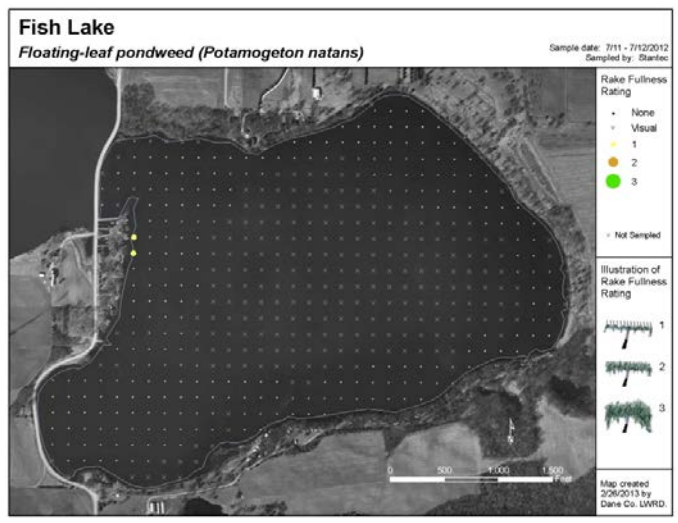
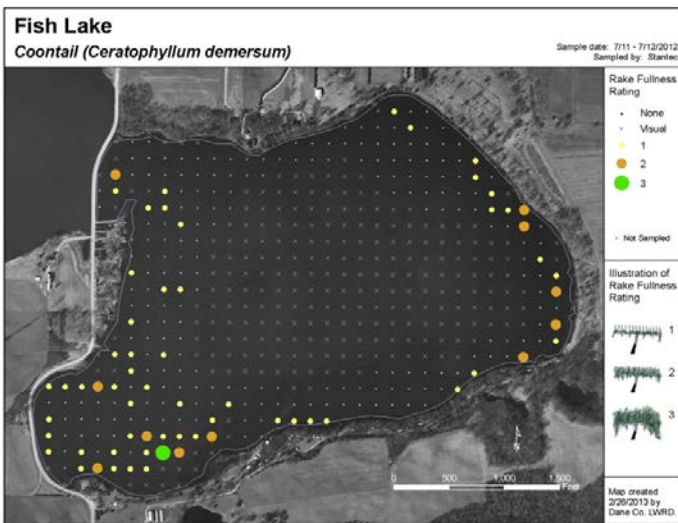
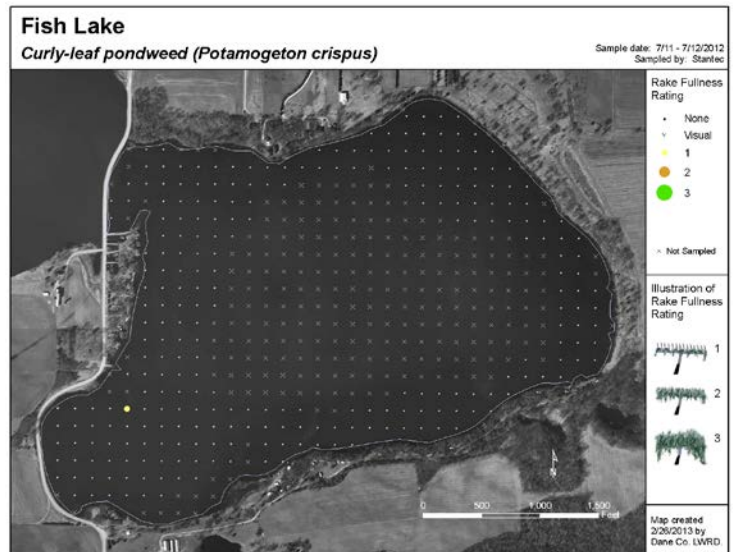
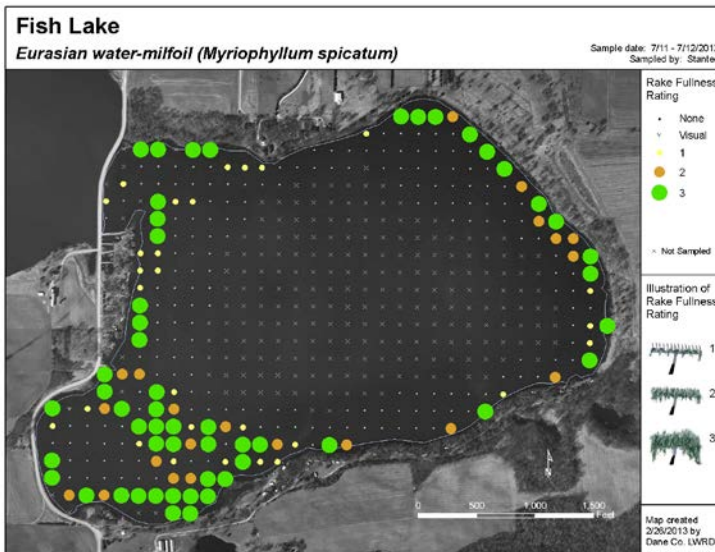
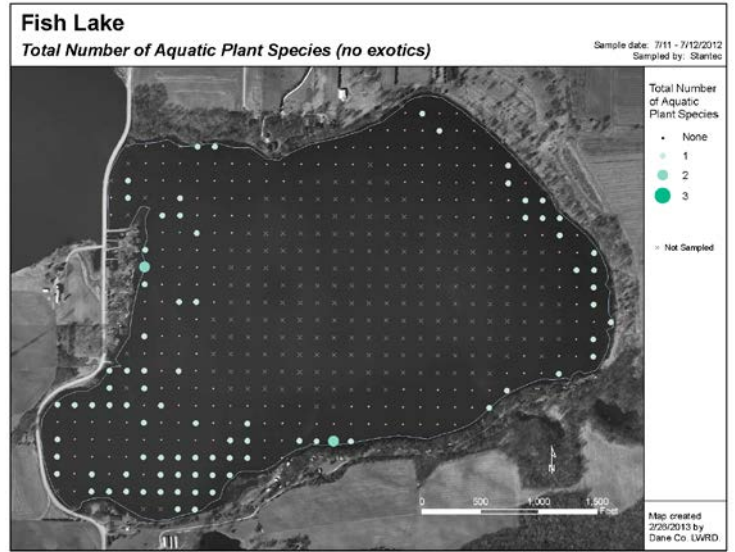
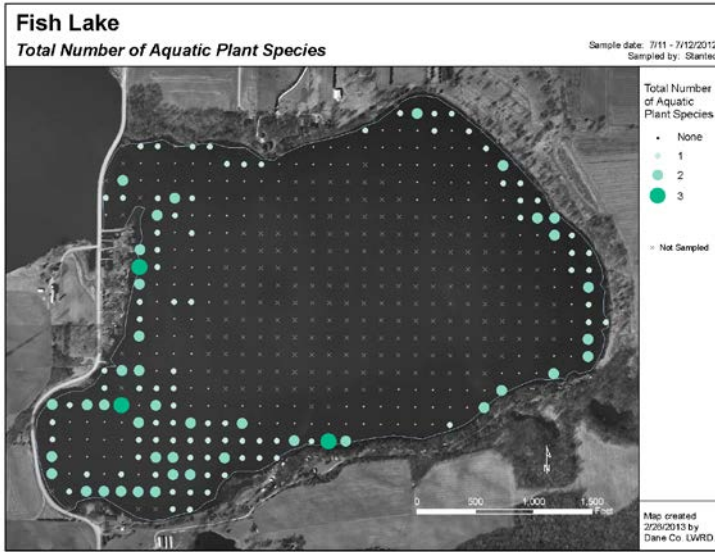
Table 4: Historical Aquatic Plant Community Statistics, Fish Lake, Dane County, Wisconsin.			
	2006	2007	2012
Frequency of occurrence at sites shallower than maximum depth of plants	72.86	95.42	45.38
Most Dominant Species	Eurasian watermilfoil	Eurasian watermilfoil	Eurasian watermilfoil
	Coontail	Coontail	Coontail
	Watermoss	White water lily	Floating-leaf pondweed
	Watershield	Floating-leaf pondweed	Watershield
	---	Watershield	White water lily
Maximum Depth of Plants	31	8.5	13
Species Richness	4	8	6
Community FQI	6.36	13.23	10.00
Average Coefficient of Conservatism	4.50	5.00	5.00

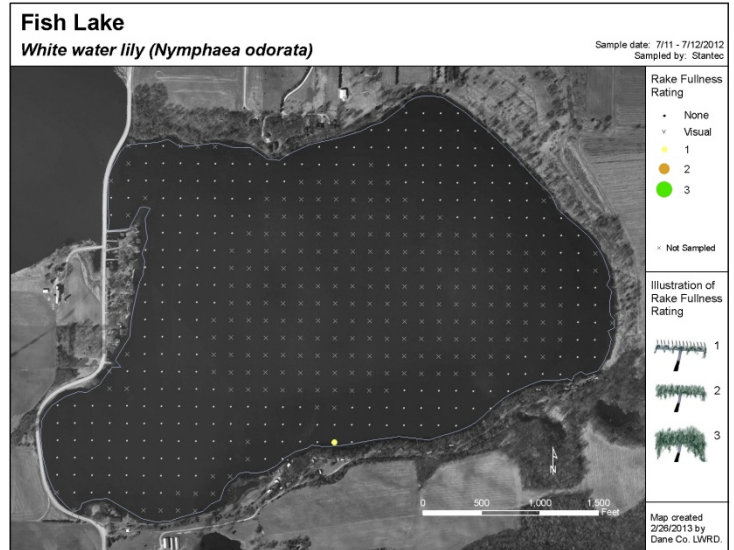
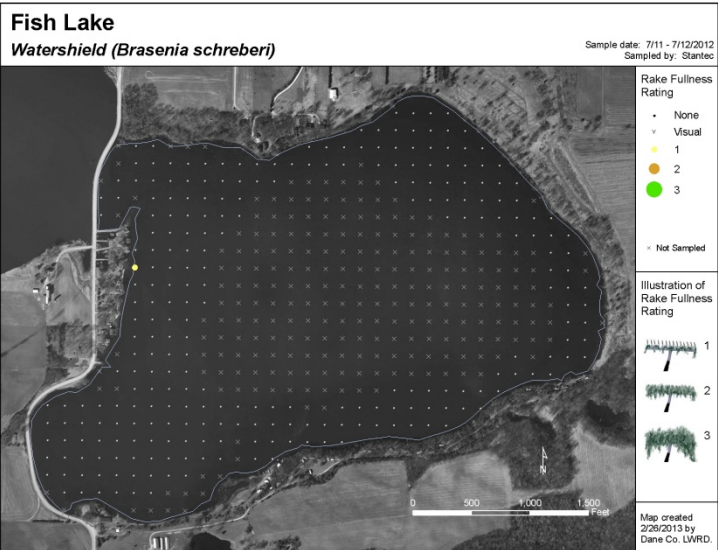
Table 5: Historical Aquatic Plant Occurrences, Fish Lake, Wisconsin.

Genus	Species	Common Name	% Relative Frequency of Occurrence		
			2006	2007	2012
<i>Brasenia</i>	<i>scherberi</i>	Watershield	0.4	0.6	0.6
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	35.4	16.2	41.6
Moss	sp.	Watermoss	11.5	---	---
<i>Myriophyllum</i>	<i>spicatum</i>	Eurasian watermilfoil	52.7	77.9	55.2
<i>Nymphaea</i>	<i>odorata</i>	White water lily	---	3.2	0.6
<i>Polygonum</i>	<i>amphibium</i>	Water smartweed	---	0*	---
<i>Potamogeton</i>	<i>amplifolius</i>	Large-leaf pondweed	---	0*	0.6
<i>Potamogeton</i>	<i>crispus</i>	Curly-leaf pondweed	---	---	---
<i>Potamogeton</i>	<i>natans</i>	Floating-leaf pondweed	---	1.3	1.3
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	---	0.6	---

* Since species was only visually recorded, no stats were computed.

APPENDIX B – AQUATIC PLANT DISTRIBUTIONS FISH LAKE (2012)





APPENDIX C – CRYSTAL LAKE PLANT STATISTICS

Table 1: 2012 Aquatic Plant Community Statistics, Crystal Lake, Dane County, WI

Aquatic Plant Community Statistics	2012
Number of sites sampled	351
Number of sites with vegetation	4
Number of sites shallower than maximum depth of plants	12
Frequency of occurrence at sites shallower than maximum depth of plants	33.33%
Simpson Diversity Index	0.84
Maximum Depth of Plants (Feet)	4
Taxonomic Richness (Number Taxa)	3
Average Number of Species per Site (less than max depth of plant growth)	0.42
Average Number of Species per Site (sites with vegetation)	1.25
Average Number of Native Species per Site (less than max depth of plant growth)	0.17
Average Number of Native Species per Site (sites with vegetation)	1.00

Table 2: 2012 Aquatic Plant Taxa-Specific Statistics, Crystal Lake, Dane County, WI

Species	Frequency of Occurrence within vegetated areas	Frequency of Occurrence at Site Shallower Than Max Depth of Plants	Percent Relative Frequency of Occurrence	Number of Intercept Points Where Detected	Average Density
Eurasian watermilfoil	75.00	25.00	60.00	3	1.00
White water lily	50.00	16.70	40.00	2	1.00

Table 3: Historical and 2012 Floristic Quality Index, Crystal Lake, Dane County, WI

Genus	Species	Common Name	Coefficient of Conservatism		
			2006	2007	2012
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	3	3	---
<i>Elodea</i>	<i>canadensis</i>	Common waterweed	3	3	---
<i>Nymphaea</i>	<i>odorata</i>	White water lily	---	6	6
<i>Potamogeton</i>	<i>foliosus</i>	Leafy pondweed	6	6	---
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	3	3	---
Total Species			4	5	1
Mean C			3.75	4.20	6.00
Floristic Quality Index (FQI)			7.50	9.39	6.00

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.).

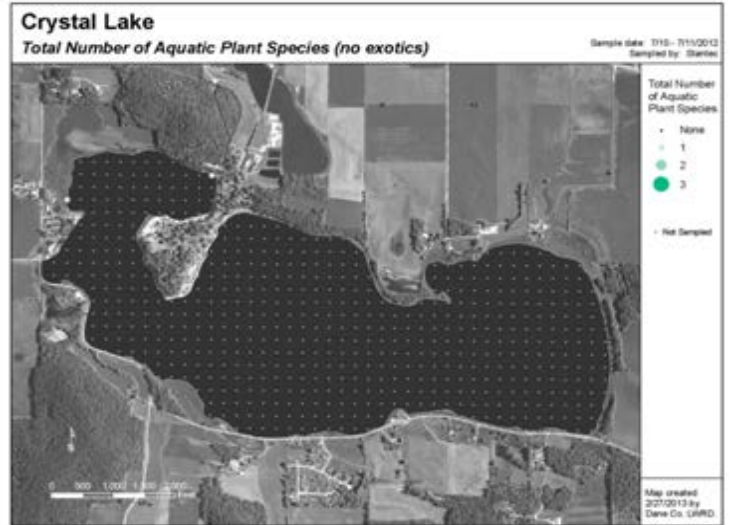
Coefficient of Conservatism (C)

- 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.

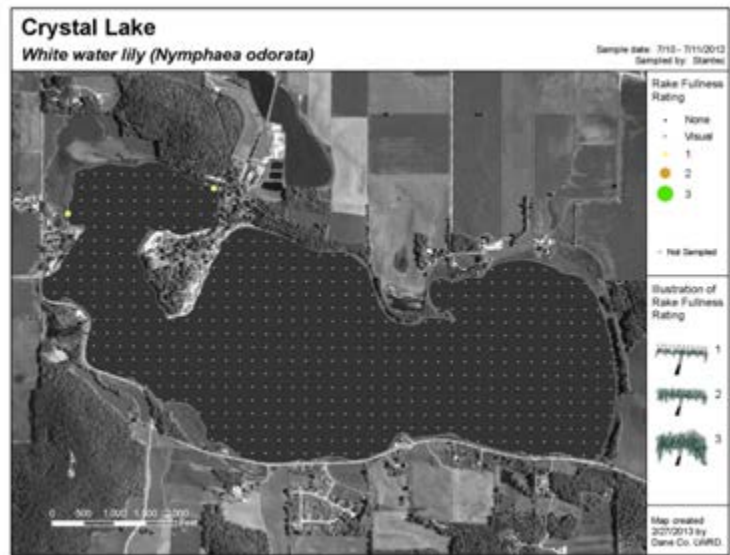
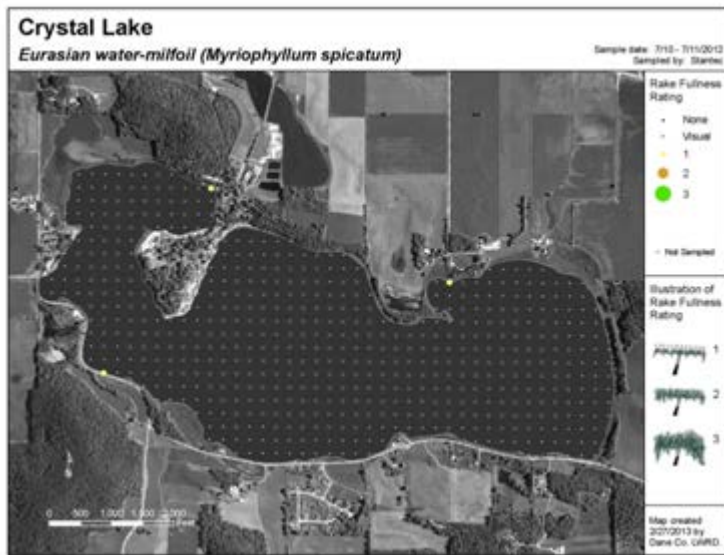
	2006	2007	2012
Frequency of Occurrence at sites shallower than maximum depth of plants	37.2	30.89	33.33
Most Dominant Species	Common waterweed	Common waterweed	Eurasian watermilfoil
	Filamentous algae	Coontail	White water lily
	Coontail	Eurasian watermilfoil	---
	Leafy pondweed	Filamentous algae	---
	Sago pondweed	Leafy pondweed	---
Maximum Depth of Plants	13	5	4
Species Richness	7	7	2
Community FQI	7.50	9.39	6.00
Average Coefficient of Conservatism	3.75	4.20	6.00

Table 5: Historical Aquatic Plant Occurrences, Crystal Lake, Wisconsin.					
Genus	Species	Common Name	% Relative Frequency of Occurrence		
			2006	2007	2012
<i>Algae</i>	<i>sp.</i>	Filamentous algae	12.8	15.4	---
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	5.8	23.1	---
<i>Elodea</i>	<i>canadensis</i>	Common waterweed	55.1	23.1	---
<i>Myriophyllum</i>	<i>spicatum</i>	Eurasian watermilfoil	3.2	15.4	60.0
<i>Nymphaea</i>	<i>odorata</i>	White water lily	---	5.1	40.0
<i>Potamogeton</i>	<i>crispus</i>	Curly-leaf pondweed	0.6	---	---
<i>Potamogeton</i>	<i>foliosus</i>	Leafy pondweed	14.1	12.8	---
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	8.3	5.1	---

APPENDIX D – AQUATIC PLANT DISTRIBUTIONS CRYSTAL LAKE (2012)



Crystal Lake



APPENDIX E – INDIAN LAKE PLANT STATISTICS

Table 1: 2012 Aquatic Plant Community Statistics, Indian Lake, Dane County, WI

Aquatic Plant Community Statistics	2012
Number of sites sampled	202
Number of sites with vegetation	20
Number of sites shallower than maximum depth of plants	199
Frequency of occurrence at sites shallower than maximum depth of plants	10.05%
Simpson Diversity Index	0.30
Maximum Depth of Plants (Feet)	6
Taxonomic Richness (Number Taxa)	3
Average Number of Species per Site (less than max depth of plant growth)	0.12
Average Number of Species per Site (sites with vegetation)	1.20
Average Number of Native Species per Site (less than max depth of plant growth)	0.11
Average Number of Native Species per Site (sites with vegetation)	1.05

Table 2: 2012 Aquatic Plant Taxa-Specific Statistics, Indian Lake, Dane County, WI

Species	Frequency of Occurrence within vegetated areas	Frequency of Occurrence at Site Shallower Than Max Depth of Plants	Percent Relative Frequency of Occurrence	Number of Intercept Points Where Detected	Average Density
Coontail	100.00	10.50	83.3	20	1.00
Eurasian watermilfoil	15	1.51	12.5	3	1.00
Common bur-reed	5	0.5	4.2	1	1.00

Table 3: Historical and 2012 Floristic Quality Index, Indian Lake, Dane County, WI

Genus	Species	Common Name	Coefficient of Conservatism	
			2006	2012
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	3	3
<i>Lemna</i>	<i>minor</i>	Small duckweed	4	---
<i>Sparganium</i>	<i>eurycarpum</i>	Common bur-reed	---	5
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	3	---
<i>Wolffia</i>	<i>columbiana</i>	Common watermeal	5	---
Total Species			4	2
Mean C			3.75	4.00
Floristic Quality Index (FQI)			7.50	5.66

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 (C)

- 0-3 taxa found in wide variety of plant communities and very tolerant of disturbance.
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- 9-10 taxa restricted to a narrow range of synecological conditions, with low tolerance of disturbance.

Table 4: Historical Aquatic Plant Community Statistics, Indian Lake, Dane County, Wisconsin.

	2006	2012
Frequency of Occurrence at sites shallower than maximum depth of plants	100	10.05
Most Dominant Species	Coontail Eurasian watermilfoil Small duckweed Common watermeal Filamentous algae	Coontail Eurasian watermilfoil Common bur-reed --- ---
Maximum Depth of Plants	8.5	6
Species Richness	7	3
Community FQI	7.50	5.66
Average Coefficient of Conservatism	3.75	4.00

Table 5: Historical Aquatic Plant Occurrences, Indian Lake, Wisconsin.				
Genus	Species	Common Name	% Relative Frequency of Occurrence	
			2006	2012
<i>Algae</i>	<i>sp.</i>	Filamentous algae	15.9	---
<i>Ceratophyllum</i>	<i>demersum</i>	Coontail	21.8	83.3
<i>Lemna</i>	<i>minor</i>	Small duckweed	16.3	---
<i>Myriophyllum</i>	<i>spicatum</i>	Eurasian watermilfoil	17.9	12.5
<i>Potamogeton</i>	<i>crispus</i>	Curly-leaf pondweed	11.3	---
<i>Sparganium</i>	<i>eurycarpum</i>	Common bur-reed	---	4.2
<i>Stuckenia</i>	<i>pectinata</i>	Sago pondweed	0.5	---
<i>Wolffia</i>	<i>columbiana</i>	Common watermeal	16.2	---

APPENDIX E – AQUATIC PLANT DISTRIBUTIONS INDIAN LAKE (2012)

