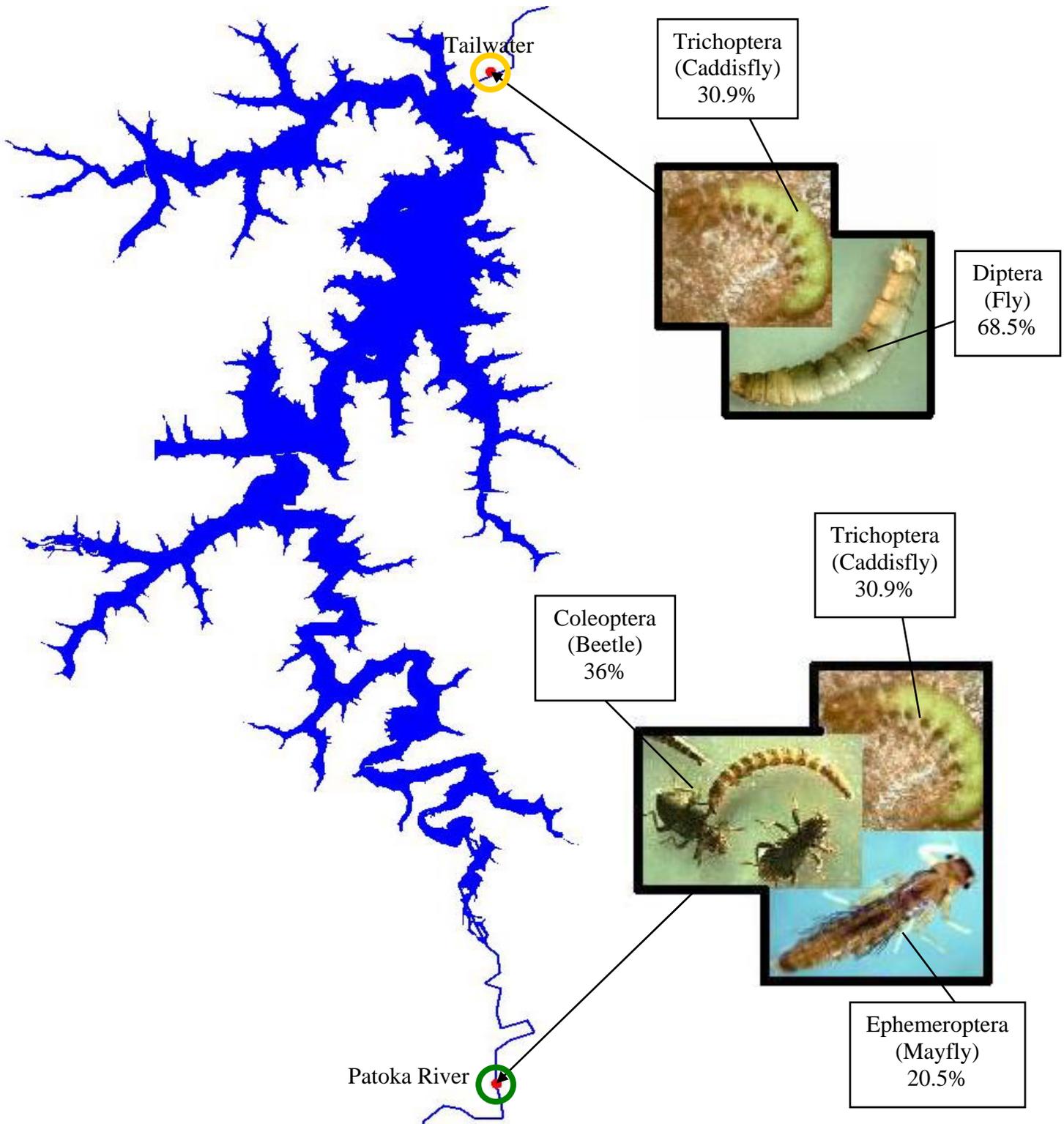


Aquatic Insects' Community Structure  
Patoka Lake Analysis  
August 18, 2004

Relative abundance of dominant taxa found at each of the sites shown below.



COMMUNITY METRICS *	Patoka Lake	
	Tailwater	Patoka River
Collection Date	8/18/04	8/18/04
Total Number of Taxa	21	45
% Contribution of Dominant Taxa	83	75
Modified Hilsenhoff Biotic Index (0, good – 10, bad)	6.17	4.10
Shannon-Wiener Index	2.12	2.52
Number of Ephemeroptera Taxa	3	8
% Ephemeroptera Taxa (Abundance)	1	20
Number of Plecoptera Taxa	0	3
% Plecoptera Taxa (Abundance)	0	0
Number of Trichoptera Taxa	7	8
% Trichoptera Taxa (Abundance)	30	30
Number of EPT Taxa	10	19
% EPT Taxa	48	42
Number of Dipteran Taxa	9	13
% Dipteran Taxa	67	10
Number of Chironomid Taxa	8	10
% Chironomid Taxa	67	4
Number of Tanytarsini Taxa	1	3
% Tanytarsini Taxa	24	1
Number of Orthoclaadiinae Taxa	2	2
% Orthoclaadiinae Taxa	21	1
% Cricotopus + Chironomus/Total Chiron.	28	2
Number of Dipteran Taxa – Tanytarsini and other Non-Insect Taxa	10	14
% Dipteran Taxa - Tanytarsini and other Non-Insect Taxa	45	12
Ratio of EPT to Chiron. Abundance	0	13
Percent Tolerant Organisms	7	1
Numbers of Individuals / m <sup>2</sup>	2,892	4,800
* Based on 4 replicate surber samples Substrate sampled – small stones		

#### 5 Most Abundant Taxa on the Tailwater

1. Rheotanytarsus exiguus group sp. (Diptera) 24.5%
2. Cricotopus / Orthocladius sp. (Diptera) 19.4%
3. Cynellus fraternus (Trichoptera) 17.4%
4. Dicrotendipes neomodestus (Diptera) 11.9%
5. Cheumatopsyche sp. (Trichoptera) 11.5%

#### 5 Most Abundant Taxa on the Patoka River

1. Psephenus herricki (Coleoptera) 21.7%
2. Chimarra obscura (Trichoptera) 17.5%
3. Baetis intercalaris (Ephemeroptera) 16.1%
4. Stenelmis sp. (Coleoptera) 13.9%
5. Cheumatopsyche sp. (Trichoptera) 10.6%