

Bird Dog Pit
Warrick County
Supplemental Survey

Date: July 28, 2009

Biologist: Michelle L. Cain

Survey Objective: Evaluate the aquatic vegetation abundance and herbicide application effectiveness.

Methods: Submersed aquatic plants were collected from 40 randomly chosen sites throughout the littoral area using a double-sided weed rake following methods outlined by Indiana Department of Natural Resources (2006).

Summary: Bird Dog Pit is an 18.1-acre reclaimed strip pit located at Blue Grass Fish and Wildlife Area. In 2002, vegetation abundance was found to be excessive and annual aquatic herbicide applications were recommended and have been implemented annually since 2002. The 2009 application only occurred in the north basin, whereas the prior treatments were lakewide.

A total of three submersed plant species was collected. The most frequently occurring species was coontail (35%), followed by chara (30%), and American pondweed (3%). Most of the rake scores were less than 3 which were comparable to 2007 and 2008. Emergent species observed were creeping water primrose, spatterdock, waterwillow, American lotus, and cattail sp. Sample site depths ranged from 0.5 to 14.0 ft and the littoral zone was classified at a depth of 11.0 ft. The Secchi disk depth was 3.1 ft.

Literature Cited:

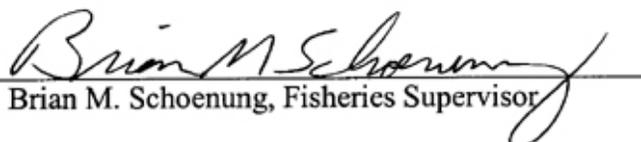
Indiana Department of Natural Resources. 2006. Tier II Aquatic Vegetation Survey Protocol. 9 pp.

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Occurrence and Abundance of Submersed Aquatic Plants - Overall

Lake: Bird Dog Pit	Secchi (ft): 3.1	SE Mean Species / Site: 0.12
Date: 7/28/2009	Littoral Sites w/Plants: 21	Mean Natives / Site: 0.68
Littoral Depth (ft): 11.0	Number of Species: 3	SE Mean Natives / Site: 0.12
Littoral Sites: 34	Max. Species / Site: 2	Species Diversity: 0.53
Total Sites: 40	Mean Species / Site: 0.68	Native Diversity: 0.53

Species	Frequency of Occurrence	Score Frequency				Dominance
		0	1	3	5	
American pondweed	2.5	97.5	2.5	0	0	0.5
Chara	30.0	70.0	12.5	5.0	12.5	18.0
Coontail	35.0	65.0	25.0	5.0	5.0	13.0

Other species noted:
 American lotus
 Spatterdock
 Creeping water primrose
 American water willow
 Cattail (sp)