

Grant # LPL 177321 Bone Lake Aquatic Life Assessment and Mapping REPORT

Aquatic Life Assessment Reports

Steve Schieffer with Ecological Integrity Service completed Sensitive Area survey data collection and reporting with assistance from Bone Lake volunteers. Data on zooplankton, benthic invertebrates, herptiles and mammals were collected and a report generated.

Brian Collins updated the Bone Lake Breeding Bird Survey previously completed in 2012.

Bone Lake Discovery Day

The Bone Lake District Wildlife and Natural Beauty Committee produced “Bone Lake Discovery Day” for families and children, to introduce them to the wildlife in the lake’s Sensitive Areas, recently surveyed for aquatic life: macroinvertebrates, aquatic macrophytes, mammals, birds, and herptiles, to promote understanding of the lake’s sensitive areas, engage youth in protecting these areas, and inspire future volunteerism.

Area G at the entrance to Fox Creek was selected for its shallow water and density of wildlife. Polk County LWRD Lakes Specialist Katelin Anderson and Senior Fisheries Biologist, Kyle Broadway, attended and assisted the lay leaders educating the children, their parents and grandparents. Children used nets to capture macroinvertebrates from the water and then identify them under magnification using provided charts. Minnows were captured and identified and then released. Aquatic macrophytes were pulled using a rake and displayed for identification.

Thirteen children and fifteen adults attended. Twelve additional families expressed interest but were unable to attend due to scheduling conflicts.

Each child received a net with telescoping handle and a magnifier, and two two-sided laminated charts for identifying aquatic plants, macro invertebrates, herptiles and birds. Each family received an Aquascope Underwater Viewer. The District board approved the programming and expenditures at a BLMD Board meeting held April 22, 2023.

Wildlife & Natural Beauty Committee

Bone Lake Discovery Day July 15, 2023

Committee members:
Cris Dueholm, Karen Engelbretson,
Bob Boyd, Teri Albright, David Klopp





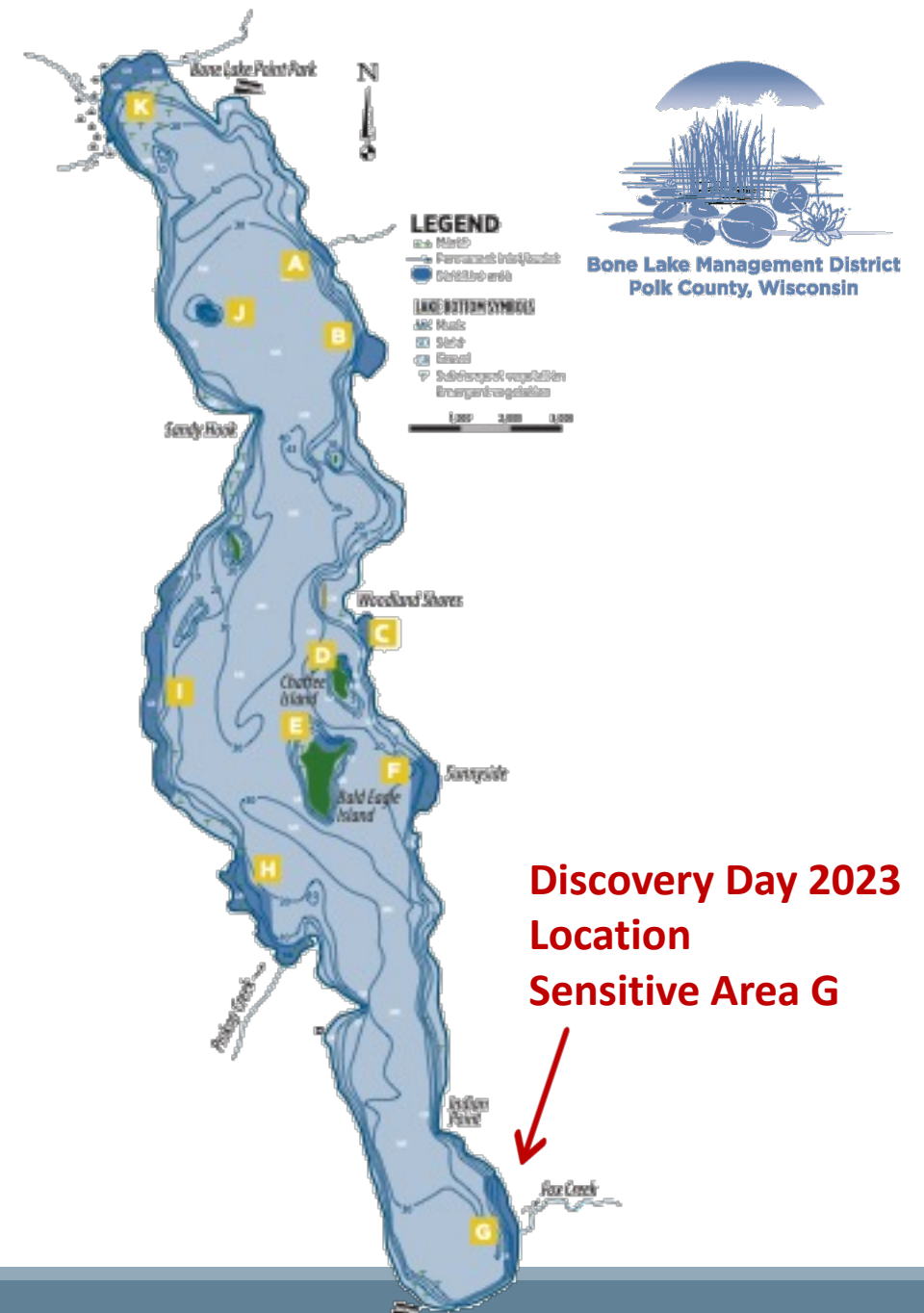
Thirteen children and fifteen adults learned about life in our lake at Bone Lake Discovery Day, July 15, 2023



Eleven Bone Lake Sensitive Areas were identified by WDNR in 1988-89 — areas that merit special protection for aquatic vegetation, fish, wildlife and lake organisms

The Bone Lake Sensitive Area Study, an evaluation of macrophytes, zooplankton, macroinvertebrates, herptiles, and mammals was conducted in 2021 and 2022

Find the study at bonelakewi.com



**Discovery Day 2023
Location
Sensitive Area G**

Wildlife and Natural Beauty Committee
Supplies for Bone Lake Discovery for kids/families

The committee met March 16 and determined the location and date for the Kids/Family Bone Lake learning initiative, to bring awareness to sensitive areas around the lake and to foster stewardship among young people and their families.

“Take people out to connect with their water.”
 —Liz Sutton, School of Freshwater Sciences, UW Milwaukee

Date: Saturday, July 15 (rain date July 22)
 Place: Sensitive Area G, Entrance to Fox Creek

Three Activities in rotation

1. Collect water at entrance to stream capturing aquatic macro invertebrates (small aquatic animals and aquatic larval stages of insects). View under magnification.
 - a. Use a taxonomic key to identify them.
 - b. Learn importance of these small organisms in the food web;
 - c. Learn which are sensitive to pollution and disturbance

2. Dip nets and capture minnows and small fish in a bucket. Use a chart to identify them. Identify plants present.

3. Walk down the creek. Listen and observe. identify birds. Look for tracks in the mud. Find evidence of wildlife living in the creek environment. Take notes, draw what you see.

Supplies. Assumes 25 children participating.

Key to aquatic macro invertebrates ID, bw 11x17 laminated	25		\$99
Chart of fish, color 8.5x11 laminated	25		\$85
Chart of plants, color 8.5x11 laminated	25		\$85
Magnifiers, assorted	25	@ \$15 - \$35	\$375- \$875
Various lab tools: dropper, plastic petri dishes, trays			\$50
Aquatic Net	25	@ \$15	\$375
Net for plankton	1	@ \$100	\$100
Net for aquatic insects	1	@ \$70	\$70
Aquavue underwater viewer	1	@ \$110	\$110
Notebooks	25	@ 5	\$125
Estimated total for supplies \$50 – \$80 per participant			\$1,500 - \$2,000
Note: Aquavue viewer, plankton net and insect net can be used by those taking lake readings			



Wildco® Student Plankton Sampler 80 micron \$100



Aquatic Dip Net 180 micron mesh for capturing insects \$70



Aquatic Net \$15



5X magnification bug viewer \$12 (5.5" long handle)



STEMKids STEMScope Portable Microscope 20-40X magnification @ \$40, discounts to \$34 each



Aquavue Underwater viewer \$110
Also helpful for secci readings

