

Orange County
Beaver Dam Lake Protection and Rehabilitation District

557 Shore Drive
New Windsor, NY 12553

Beaver Dam Lake Water Depth Data
September 25, 2013

Surface Elevation -- At “normal pool” (water level at the crest of the dam spillway), the surface elevation is shown on US Geological Survey maps as 331 feet above sea level.

Surface Area – At “normal pool”, the surface area of the lake is estimated to be approximately 164 acres. (Source: US Army Corp of Engineers and Orange County Tax Map data)

Water Volume – At “normal pool”, the volume of water in the lake is estimated to be approximately 1440 acre feet or slightly over 469 million gallons. (Source: US Army Corp of Engineers)

Note: During Hurricane Irene (8-28-2011), the water level in the lake was measured at approximately 42 inches above “normal pool” representing an increase of over 190 million gallons. Many times that amount flowed through the lake as a result of this storm.

Lake Depth -- In general terms, water depths vary from fairly shallow in the southeast cove and in the north inlet “finger” to approximately 28 feet deep near the dam. Other shallow locations include an area near the small island, the small cove near the peninsula and the area south of the large island. Much of the central part of the lake ranges from 10 feet to less than 20 feet deep. The area from the large island to the dam varies from approximately 15 feet to 28 feet deep. There are also significant variations in the lake bottom throughout the lake including steep drop offs and submerged objects (stone walls, etc)

The attached pages contain basic water depth data for Beaver Dam Lake compiled from two reports prepared by Allied Biological, Inc for the Beaver Dam Lake Protection and Rehabilitation District.

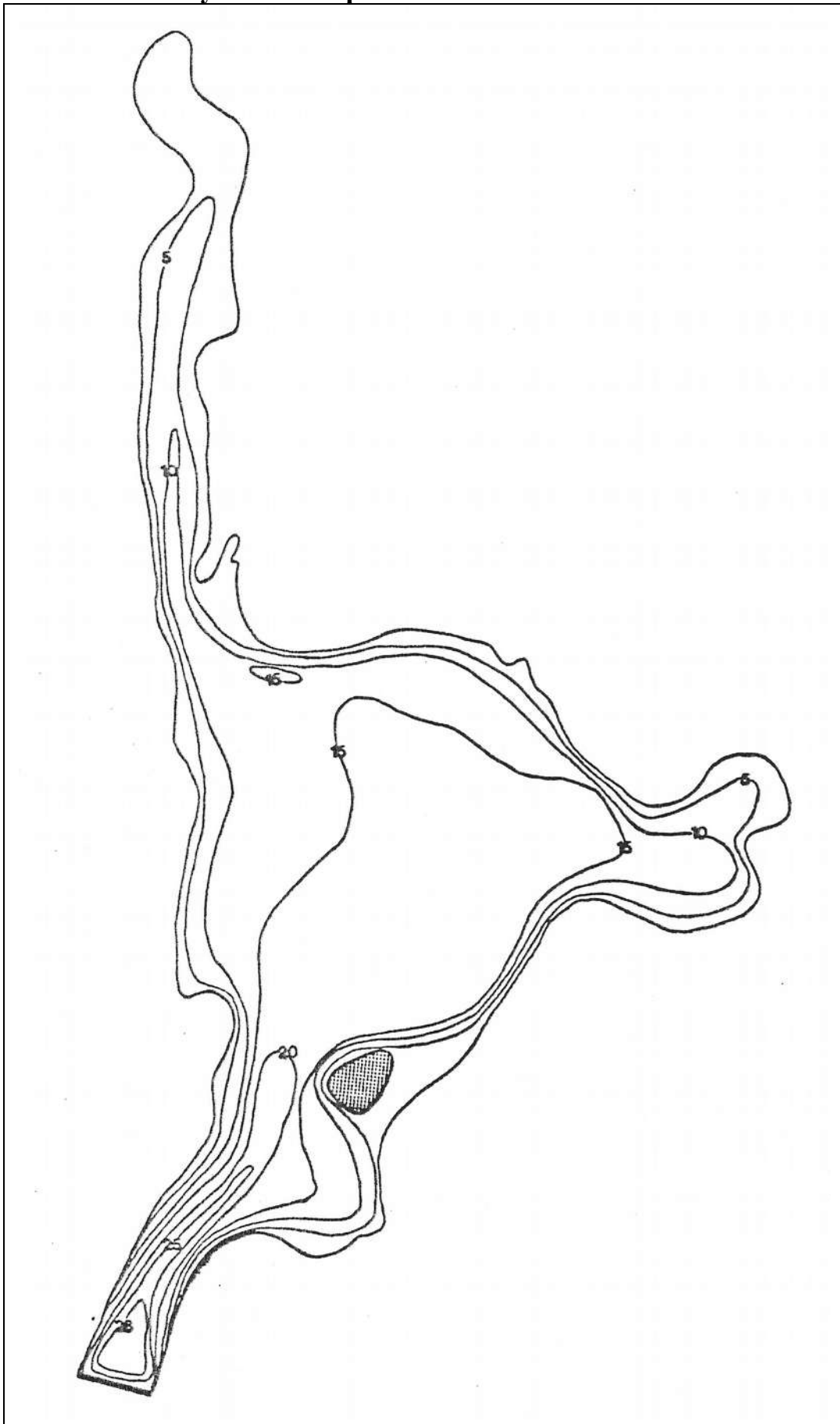
The Bathymetric Map of Beaver Dam Lake shown on page 2 is a very basic contour map of the lake bottom prepared as part of a lake study performed in 1992. The contour lines shown are in five foot intervals. Variations in the lake bottom of less than five feet are not identified. Depths in some portions of the northern inlet and southeast cove are likely to be somewhat less than shown due to twenty years of additional sedimentation from feeder streams, roadway run-off and accumulated aquatic vegetation decay.

The Water Depth Log and maps shown on pages 3 thru 5 were compiled from the 2012 Aquatic Macrophytic Survey Report for Beaver Dam Lake. Data shown on these pages was obtained during a field survey of the lake performed on September 7, 2012. The Water Depth Log (page 3) lists the depth of the lake at 102 GPS referenced sampling locations. The water depth was measured using a boat mounted depth finder, a handheld depth gun or a calibrated metal pole as appropriate for the conditions. The locations and depths listed in the log are also identified on the maps shown on pages 4 and 5.

The information provided in this document does not depict all actual conditions or submerged hazards likely to be present on the lake bottom and should only be used as a general guide. Items not depicted on the 1992 map nor in the 2012 data include but are not limited to submerged stone walls, old building foundations, tree stumps, tree branches, logs and other objects known or suspected to exist in various parts of the lake. Due to the dynamic nature of the lake, the contour of some parts of the lake bottom as well as the locations of certain submerged and floating objects are subject to change.

These maps and tables will be updated as additional information becomes available.

Bathymetric Map of Beaver Dam Lake - 1992



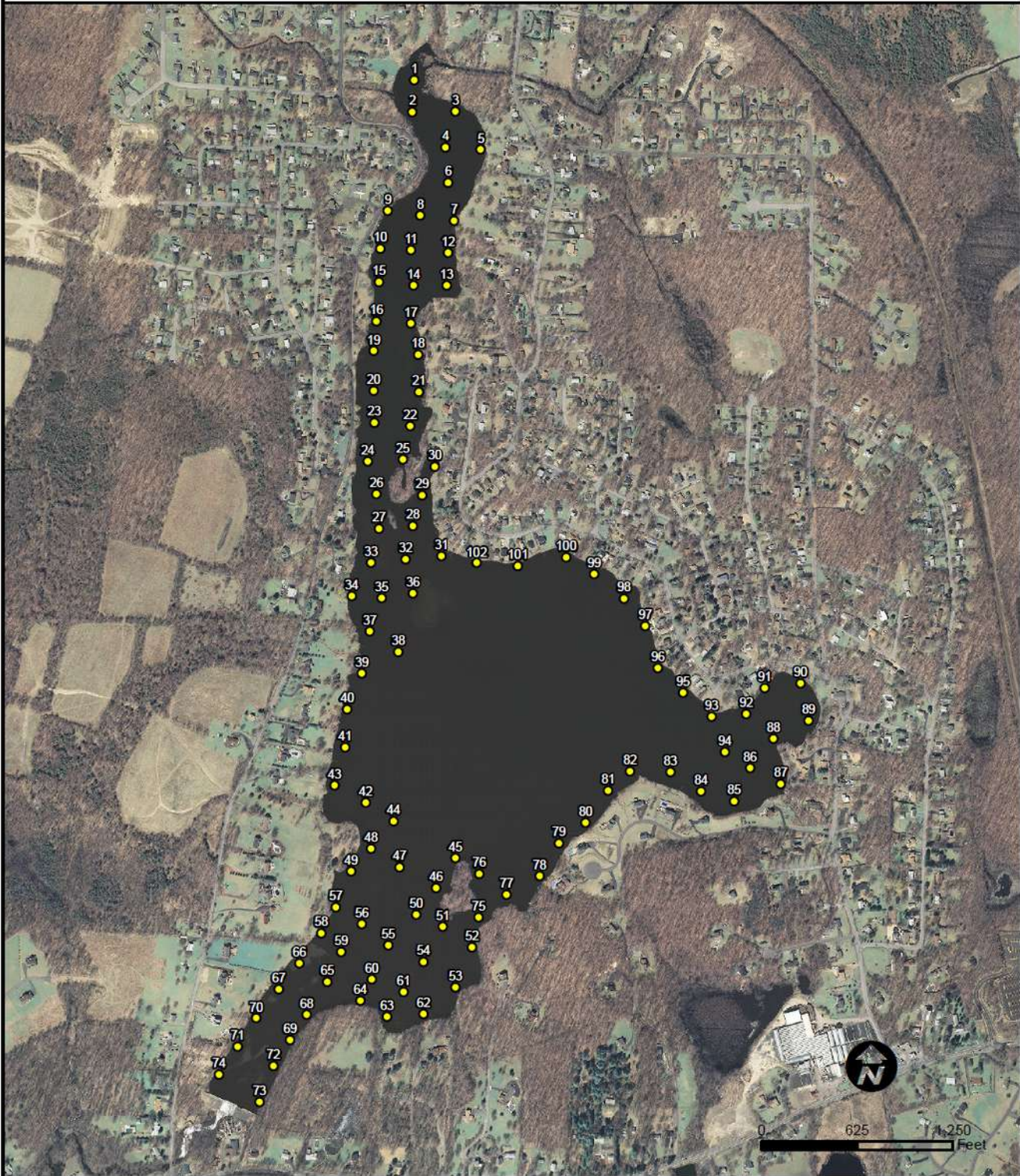
(From "Lake Survey Report" Beaver Dam Lake, Orange County, NY -- Allied Biological, Inc. -- August, 1992)

Beaver Dam Lake -- Water Depth Log

(Compiled From Allied Biological Aquatic Vegetation Survey Conducted on September 7, 2012)

Sample Point	Depth (Feet)	Latitude	Longitude	Sample Point	Depth (Feet)	Latitude	Longitude
1	2.0	41.45279°	-74.117188°	52	2.5	41.437295°	-74.115898°
2	2.5	41.452214°	-74.11723°	53	6.0	41.436585°	-74.116301°
3	2.5	41.452226°	-74.116206°	54	11.5	41.437039°	-74.117055°
4	3.0	41.451587°	-74.116446°	55	12.0	41.437332°	-74.117895°
5	3.5	41.451549°	-74.115615°	56	18.5	41.437715°	-74.118527°
6	4.0	41.450946°	-74.116379°	57	2.0	41.438022°	-74.11913°
7	2.0	41.450266°	-74.116243°	58	2.0	41.437549°	-74.119486°
8	4.5	41.450375°	-74.117051°	59	16.5	41.437216°	-74.119009°
9	2.0	41.450455°	-74.117823°	60	14.5	41.436734°	-74.118289°
10	2.5	41.44978°	-74.118014°	61	12.0	41.436498°	-74.117526°
11	3.5	41.449757°	-74.117272°	62	2.5	41.436106°	-74.117056°
12	3.0	41.449701°	-74.116398°	63	4.0	41.436057°	-74.117933°
13	3.5	41.449119°	-74.116432°	64	2.5	41.43635°	-74.118558°
14	3.5	41.449119°	-74.117222°	65	20.5	41.43669°	-74.119348°
15	3.0	41.449188°	-74.118043°	66	5.0	41.437018°	-74.120017°
16	3.0	41.448483°	-74.118109°	67	11.0	41.436563°	-74.120513°
17	5.0	41.448441°	-74.117292°	68	9.5	41.436106°	-74.119849°
18	2.5	41.447879°	-74.11712°	69	9.5	41.435652°	-74.120248°
19	3.5	41.447951°	-74.118181°	70	8.0	41.436042°	-74.12104°
20	6.0	41.447237°	-74.118182°	71	7.0	41.435537°	-74.121487°
21	5.2	41.447209°	-74.117107°	72	9.0	41.435193°	-74.120639°
22	6.5	41.446605°	-74.11732°	73	10.5	41.434552°	-74.120969°
23	6.6	41.446669°	-74.11817°	74	6.5	41.435039°	-74.121942°
24	9.0	41.445981°	-74.118331°	75	1.5	41.437825°	-74.115735°
25	7.0	41.446009°	-74.117491°	76	3.0	41.438598°	-74.115722°
26	9.5	41.445397°	-74.118133°	77	3.5	41.438227°	-74.115063°
27	9.5	41.44478°	-74.118067°	78	5.5	41.438566°	-74.114274°
28	8.0	41.444822°	-74.117267°	79	8.5	41.439139°	-74.113812°
29	2.5	41.445373°	-74.117031°	80	3.5	41.439508°	-74.113178°
30	2.5	41.445877°	-74.116738°	81	2.0	41.44008°	-74.112638°
31	7.0	41.444279°	-74.116577°	82	4.5	41.440426°	-74.11211°
32	10.5	41.444229°	-74.117438°	83	4.5	41.440404°	-74.111156°
33	6.0	41.444173°	-74.118257°	84	5.0	41.440066°	-74.110427°
34	3.5	41.443575°	-74.118725°	85	4.5	41.439877°	-74.109627°
35	8.0	41.443536°	-74.118008°	86	10.5	41.440476°	-74.10925°
36	9.5	41.443623°	-74.117263°	87	3.0	41.440188°	-74.10853°
37	2.5	41.442945°	-74.118301°	88	3.0	41.441°	-74.10869°
38	9.0	41.442576°	-74.117616°	89	3.5	41.441316°	-74.107849°
39	4.0	41.44219°	-74.11849°	90	1.5	41.441984°	-74.108036°
40	2.5	41.441552°	-74.118853°	91	2.0	41.441903°	-74.108889°
41	7.0	41.440877°	-74.118895°	92	2.0	41.441441°	-74.109331°
42	5.5	41.43989°	-74.118409°	93	2.5	41.441391°	-74.110155°
43	3.5	41.440195°	-74.119163°	94	12.5	41.440762°	-74.10985°
44	17.0	41.43955°	-74.117749°	95	2.5	41.441825°	-74.110834°
45	4.5	41.438894°	-74.11628°	96	8.0	41.442268°	-74.111434°
46	5.5	41.438358°	-74.116748°	97	6.0	41.44302°	-74.111737°
47	17.0	41.438722°	-74.117606°	98	6.0	41.443513°	-74.112241°
48	12.5	41.439062°	-74.118287°	99	5.5	41.443951°	-74.112945°
49	6.5	41.438665°	-74.118768°	100	2.5	41.444253°	-74.11361°
50	11.0	41.437882°	-74.117217°	101	3.0	41.444097°	-74.114763°
51	3.0	41.43766°	-74.116591°	102	2.5	41.444156°	-74.115745°

Sample Point Distribution



Beaver Dam Lake Aquatic Vegetation Survey
September 7, 2012

Total Sample Points: 102

Sample Point: ●

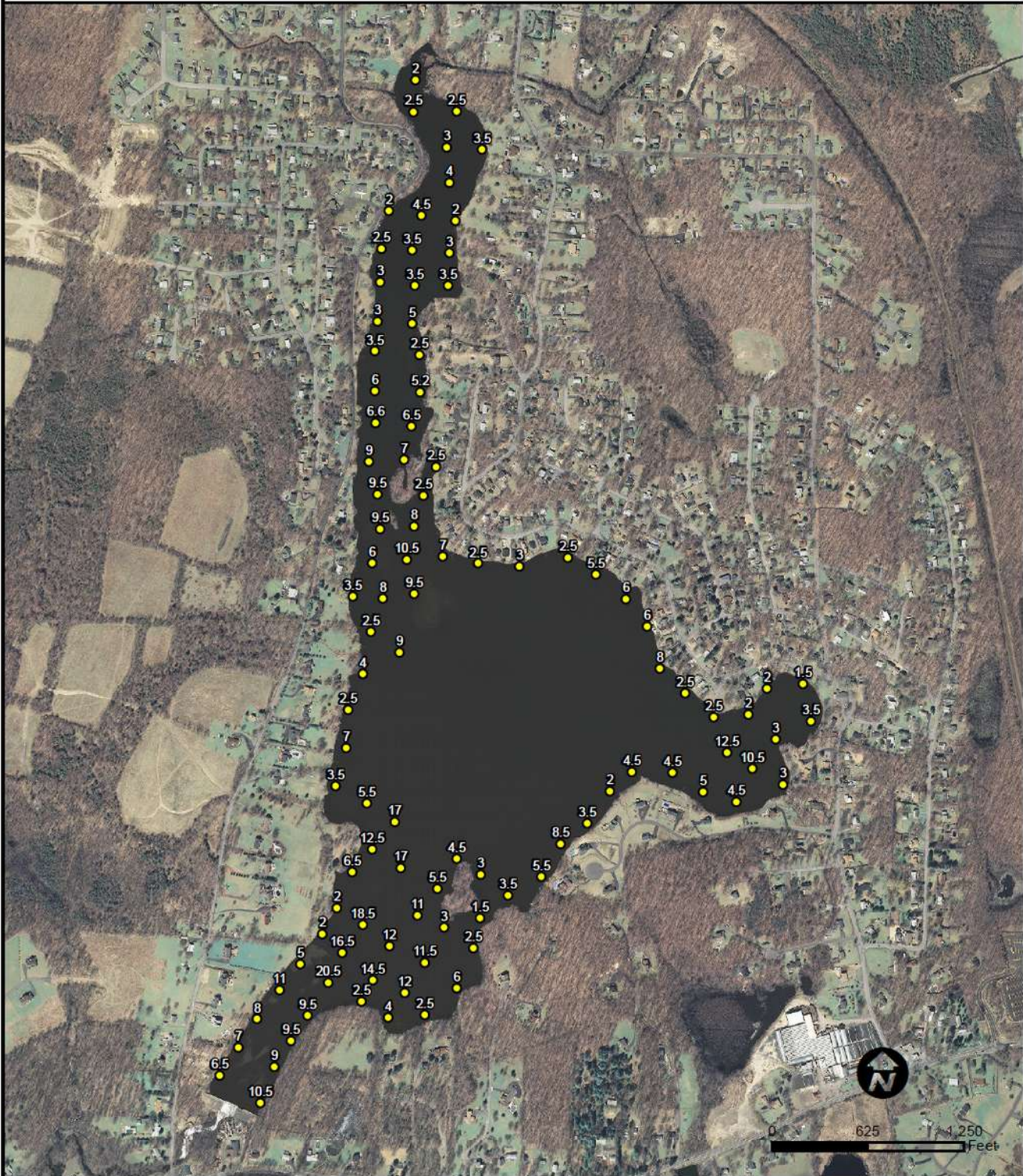


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1-800-245-2932

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Water Depth Distribution



Beaver Dam Lake Aquatic Vegetation Survey September 7, 2012

Total Sample Points: 102

Water Depth Station: ● (depth in feet)



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