

Lake Lacawac, Bruce R. Hargreaves, Lehigh University (brh0@lehigh.edu, http://www.lehigh.edu/~brh0)

Weather platform moved to lake center on 5 May 05

The water level sensor (referenced to dock) settles for several days after moving platform to lake center and thus underestimates water level during this period

H310 sensor depth & Lake level are based on differential pressure

sensor with ca 0.1mm resolution & vertical position referenced to bottom of lake.

Sensor PSIG converted to depth using density of water at 4°C (1.43321 psi/m)

Lake level is referenced also to lower frame of dock at SE corner (2003-May2005)

(Actual water level at dock varies seasonally with density of water column and hourly from precip, runoff, evaporation, seepage & outflow. Outflow also varies with status of beaver dam).

		5280 ft/mile		1609 m/mile																																	
		Tair avg F	Tair max F	Tair min F		Rain-in	WS-mph	WS max mph																													
		69.1	87.2	47.1		4.78	3.3	30																													
Month summary	Tair avg-C	20.6	30.7	8.4	81.4	121.4	1.5	13.5	217.1	964.4	733314	1519620	24.4	23.8	24.0	21.0	17.1	12.9	9.3	7.4	5.7	5.0	10.0	26.5	121.4	12.3	18.7	12.0									
	Tair Hi-C																																				

month	(All)	====depths roughly guessed at dock except for H310====																				
		Depths of TW sensors at dock										0.1	0.5	1	2	2.5	2.5	2.5	2.5	2.5	1.2	2.5
		Depths of TW sensors at lake center										0.1	0.5	1	2	3	4	5	6	8	10.1	11

Data		WS																		H310									
Date	Day of Yr	Tair avg-C	Tair Hi-C	Tair Min-C	RHair-%	Rain-mm	WS-m/s	WS Max-m/s	WDIR-deg	Barom-mb	Sum Rad W/m2	Sum PAR uM/m2/s	Tw 0.1m	Tw 0.5m	Tw 1m	Tw 2m	TW3 m	TW4 m	TW5 m	TW6m	TW8m	TW10-C	TW12 m	depth-m (4oC)	Lakelevel-mm (4oC)	cumulative rain-mm	Batt min-V	RH% CR10enc	RH% MUXenc
6/1/2005	152	16.3	21.8	9.6	78.1	0.0	1.0	7.2	121.0	970.0	25218	51108	19.1	18.5	18.5	17.0	15.1	12.0	8.5	7.0	5.4	5.3	4.9	10.0	25.2	0.0	12.4	12.4	10.6
6/2/2005	153	17.1	21.8	11.0	75.3	0.0	1.5	6.6	172.2	970.6	31808	64473	20.2	19.6	19.2	17.3	15.2	12.1	8.6	7.0	5.4	5.3	4.9	10.0	22.2	0.0	12.4	12.8	10.4
6/3/2005	154	14.8	17.5	12.2	91.5	5.5	1.2	6.1	127.9	967.6	12128	25717	20.2	19.9	20.1	17.6	15.3	12.1	8.6	7.0	5.5	5.3	4.9	10.0	19.9	5.5	12.4	12.1	10.8
6/4/2005	155	18.4	23.9	14.2	84.1	2.2	1.2	5.0	195.6	962.9	24312	53427	21.1	20.0	20.2	17.8	15.4	12.1	8.6	7.1	5.5	5.3	4.9	10.0	26.1	7.7	12.4	13.9	10.3
6/5/2005	156	20.6	27.1	14.0	82.9	0.0	1.4	6.6	231.4	963.9	29299	62019	22.3	21.8	21.2	18.1	15.6	12.2	8.7	7.0	5.5	5.3	4.9	10.0	23.7	7.7	12.4	15.0	10.1
6/6/2005	157	20.8	28.1	17.9	88.2	12.5	1.6	13.5	236.5	963.0	18687	38844	23.2	22.7	22.3	18.4	15.7	12.3	8.8	7.1	5.6	5.4	4.9	10.0	26.3	20.2	12.4	15.7	10.1
6/7/2005	158	21.9	28.6	16.2	75.5	0.0	1.8	8.5	270.4	960.9	30912	64132	23.3	22.9	23.4	18.8	15.8	12.3	8.9	7.3	5.6	5.4	4.9	10.0	32.8	20.2	12.4	16.8	10.2
6/8/2005	159	24.2	30.7	17.0	69.8	0.0	1.3	8.4	218.6	963.3	30386	62888	24.8	24.0	24.0	19.2	15.9	12.3	9.0	7.3	5.6	5.4	5.0	10.0	28.7	20.2	12.4	17.0	10.1
6/9/2005	160	23.7	28.3	18.3	78.9	0.0	1.3	7.8	155.9	967.5	23408	48032	25.6	25.0	24.8	19.5	16.0	12.4	9.0	7.3	5.6	5.4	5.0	10.0	24.6	20.2	12.4	17.6	9.9
6/10/2005	161	24.2	27.8	21.5	85.7	0.0	1.8	6.6	222.9	967.8	20832	43812	25.8	25.4	25.4	19.8	16.2	12.4	9.0	7.3	5.7	5.4	5.0	10.0	20.9	20.2	12.4	18.9	10.1
6/11/2005	162	23.0	27.2	21.2	95.7	28.6	0.8	6.2	185.7	966.9	14459	30335	26.3	25.7	26.1	20.1	16.3	12.5	9.1	7.4	5.7	5.4	5.0	10.0	32.7	48.8	12.4	19.6	12.3
6/12/2005	163	24.3	28.2	21.7	84.1	0.1	1.2	5.4	208.0	965.4	23608	50077	26.5	26.0	26.2	20.5	16.4	12.6	9.1	7.5	5.7	5.5	5.0	10.1	50.6	48.9	12.4	21.2	11.7
6/13/2005	164	25.0	30.4	19.8	78.6	0.0	1.3	5.1	253.5	959.7	31692	67045	27.6	26.7	26.6	20.8	16.5	12.7	9.2	7.4	5.7	5.4	5.0	10.1	47.1	48.9	12.4	20.4	11.4
6/14/2005	165	24.9	29.0	22.0	80.3	0.0	2.3	10.7	253.2	954.8	28433	60192	27.5	27.1	27.5	21.3	16.7	12.7	9.2	7.5	5.7	5.4	5.0	10.0	41.7	48.9	12.4	21.1	11.3
6/15/2005	166	22.6	24.5	18.7	74.6	0.0	2.3	9.1	258.9	952.5	26171	54189	27.1	26.7	27.4	21.8	16.8	12.8	9.3	7.5	5.7	5.5	5.0	10.0	35.1	48.9	12.4	20.3	10.7
6/16/2005	167	17.4	21.7	12.1	91.1	7.4	1.9	9.1	264.8	951.6	12499	26132	25.5	25.2	25.8	22.3	16.9	12.8	9.3	7.5	5.7	5.5	5.0	10.0	31.4	56.3	12.4	17.3	11.0
6/17/2005	168	13.5	18.7	9.9	89.7	6.9	1.7	11.0	266.8	954.8	20921	42813	23.6	23.3	24.0	22.9	17.0	12.9	9.4	7.5	5.7	5.5	5.0	10.0	35.1	63.2	12.3	16.2	11.6
6/18/2005	169	15.1	17.4	13.3	86.3	0.0	2.4	6.9	320.6	961.0	15421	32037	22.5	22.1	22.8	22.6	17.2	12.9	9.4	7.6	5.8	5.5	5.0	10.0	36.2	63.2	12.4	17.7	11.5
6/19/2005	170	15.7	20.0	11.6	85.6	0.0	1.4	6.2	137.9	969.5	23527	48243	22.1	21.8	22.3	21.8	17.3	13.0	9.4	7.6	5.8	5.5	5.1	10.0	32.3	63.2	12.4	18.3	11.7
6/20/2005	171	17.2	23.5	10.5	78.0	0.0	1.0	4.8	184.6	971.3	31621	64722	23.1	22.4	22.5	21.8	17.6	13.0	9.5	7.6	5.8	5.5	5.1	10.0	28.9	63.2	12.4	18.6	12.2
6/21/2005	172	19.3	24.3	13.5	73.5	0.0	1.5	6.4	259.4	965.4	30929	63150	23.5	23.1	23.3	22.1	17.8	13.1	9.5	7.6	5.8	5.5	5.1	10.0	24.7	63.2	12.4	19.0	11.9
6/22/2005	173	18.4	23.2	14.2	77.8	0.2	2.3	8.9	281.4	962.9	18609	38200	23.2	22.9	23.5	22.6	18.0	13.2	9.6	7.6	5.8	5.5	5.1	10.0	20.7	63.4	12.4	19.1	11.8
6/23/2005	174	16.7	23.6	8.4	66.6	0.0	1.1	6.8	229.1	969.0	34438	69355	23.3	22.8	22.9	22.3	18.2	13.3	9.6	7.7	5.8	5.5	5.1	10.0	15.7	63.4	12.4	17.3	12.1
6/24/2005	175	21.0	27.1	12.8	70.5	0.0	1.6	6.8	238.7	968.9	30579	62256	23.7	23.3	23.4	22.5	18.4	13.4	9.7	7.7	5.8	5.5	5.1	10.0	10.7	63.4	12.4	19.5	12.8
6/25/2005	176	24.2	29.7	18.3	71.2	0.0	1.3	6.1	240.6	968.0	32194	65298	25.0	24.4	24.4	22.8	18.6	13.4	9.7	7.7	5.8	5.5	5.1	10.0	6.3	63.4	12.4	21.6	13.5
6/26/2005	177	25.4	30.0	20.1	76.6	0.0	1.0	5.6	190.8	969.3	27816	56714	26.8	25.6	25.4	23.2	18.8	13.6	9.7	7.7	5.8	5.5	5.1	10.0	2.1	63.4	12.4	23.1	14.6
6/27/2005	178	24.3	28.5	20.3	80.5	0.0	1.5	6.4	151.5	971.3	28876	59681	27.6	26.9	26.2	23.4	19.0	13.7	9.8	7.7	5.8	5.6	5.1	10.0	-1.9	63.4	12.4	23.7	14.9
6/28/2005	179	24.3	29.4	20.7	86.2	3.6	1.2	4.9	223.2	967.1	23552	50141	28.0	27.1	27.1	23.7	19.2	13.8	9.8	7.7	5.8	5.6	5.1	10.0	-3.1	67.0	12.4	24.3	16.7
6/29/2005	180	21.9	24.5	20.2	96.3	54.4	1.1	7.1	213.4	964.2	8337	17673	26.9	26.5	27.1	24.0	19.5	14.0	10.0	7.8	5.9	5.6	5.1	10.0	27.2	121.4	12.4	24.7	15.7
6/30/2005	181	22.6	27.4	19.0	88.7	0.0	1.1	5.0	199.9	962.2	22640	46915	26.8	25.8	26.3	24.3	19.8	14.3	10.2	7.9	5.9	5.6	5.1	10.1	71.0	121.4	12.4	26.0	17.9