

Lake Lacawac, Bruce R. Hargreaves, Lehigh University (brh0@lehigh.edu/~brh0) 41°22.5'N 75°17.3'W elevation 428m
 18 Apr 2014, 10:40-11:40am EDT: platform moved to lake center 16Nov 2013: platform move to dock 11:45-13:00 EDT
 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 40C (1.43321 psf/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).

Month summary	avg Tw	Tair avg-C	Tair min-C	RHair-%	Rain-mm	WS Max-mpH	WS Min-mpH	WDIR-deg	Barom-mb	Sum Rad W/m2	Sum PAR μMols/m2	Std pressure at sea level = 1 atm = 760 mm Hg = 29.92" Hg = 1013.2 mbars		Std pressure at 428m elevation = 724 mm Hg, 29.61 in. Hg. (965.2 mbars)		Tw 0.1m F	Tw 0.5m F	Tw 1m F	Tw 2m F	Tw 3m F	Tw 4m F	Tw 5m F	Tw 6m F	Tw 8m F	Tw 10m F	Tw 12m F	H310_z (m)	Lakelevel-mm (40C)	cumul. rain-mm	Batt min-V	RH% CR10 enc	RH% MUX enc	
												73.5	73.0	72.6	70.5																		62.9
month summary	avg Tw	13.6	18.9	29.0	7.1	74.0	99.1	1.7	10.4	223.5	965.7	609527133	1261	23.6	22.8	22.6	21.4	17.2	13.2	10.6	9.2	6.9	6.1	6.0	6.0	6.0	11.2	59.1	99.1	12.5	11.1	15.9	
month	(All)																																

PAR & PYR Integration period=15min instead of 60min after 11am on 9/11/2013

Location	% records	Date	Day of Yr	Tair avg-C	Tair Min-C	RHair-%	Rain-mm	WS Max	WDIR-deg	Barom-mb	Sum Rad J/m2	Sum PAR μMols/m2	Std pressure at sea level = 1 atm = 760 mm Hg = 29.92" Hg = 1013.2 mbars		Std pressure at 428m elevation = 724 mm Hg, 29.61 in. Hg. (965.2 mbars)		Tw 0.1m	Tw 0.5m	Tw 1m	Tw 2m	Tw 3m	Tw 4m	Tw 5m	Tw 6m	Tw 8m	Tw H310-C	Tw 12m	H310 depth-mm (40C)	Lakelevel-cumul. rain-mm (40C)	Batt min-V	RH% CR10 enc	RH% MUX enc
													73.5	73.0	72.6	70.5																
LC	100%	6/12/2014	152	15.5	22.0	7.1	64.4	0.0	1.5	6.8	212	974.7	29819976	62.2	20.92	20.43	20.07	19.61	15.00	12.19	10.25	9.10	6.70	5.9	5.82	11.2	66.3	0.000	12.6	10.0	11.7	
LC	100%	6/22/2014	153	19.8	26.8	12.3	60.2	0.0	1.8	5.9	231	969.7	27953627	57.9	21.73	21.20	20.66	19.71	15.17	12.26	10.28	9.09	6.69	5.9	5.82	11.2	59.9	0.000	12.6	9.6	11.3	
LC	100%	6/3/2014	154	21.6	26.6	16.5	74.5	1.4	1.4	6.2	259	963.2	20673992	43.6	22.93	22.57	21.48	19.93	15.30	12.34	10.29	9.10	6.75	6.0	5.86	11.2	56.3	1.400	12.6	9.5	11.3	
LC	100%	6/5/2014	155	18.5	22.2	8.2	65.7	0.2	1.6	8.5	283	960.3	26719737	54.4	23.46	23.00	22.58	20.07	15.45	12.40	10.26	9.09	6.76	6.0	5.86	11.2	50.6	1.800	12.6	9.6	11.1	
LC	100%	6/5/2014	156	16.0	20.2	13.5	75.3	8.0	2.4	8.7	258	957.0	19672293	40.6	22.96	22.96	22.89	20.29	15.62	12.43	10.30	9.10	6.76	6.0	5.91	11.2	51.1	9.600	12.6	10.0	19.6	
LC	100%	6/6/2014	157	14.6	19.0	10.3	69.8	0.0	2.6	10.4	313	962.4	20023271	41.2	21.70	21.69	21.78	21.08	15.71	12.46	10.33	9.07	6.76	6.0	5.92	11.2	45.3	9.600	12.5	11.7	12.2	
LC	100%	6/7/2014	158	17.4	24.9	9.9	66.5	0.0	1.4	6.9	229	965.5	28478675	58.1	21.92	21.81	21.65	20.96	15.82	12.56	10.30	9.10	6.77	6.0	5.93	11.1	38.8	9.600	12.6	10.2	12.5	
LC	100%	6/8/2014	159	19.0	25.2	10.2	64.5	0.0	1.5	7.9	208	963.5	26753780	55.1	22.75	22.52	22.18	21.06	16.00	12.62	10.35	9.08	6.78	6.0	5.94	11.1	32.9	9.600	12.5	9.9	11.8	
LC	100%	6/9/2014	160	17.0	20.4	15.4	91.2	10.6	1.4	6.8	140	963.2	44500515	9.9	22.32	22.31	22.34	21.16	16.11	12.67	10.38	9.13	6.79	6.1	5.96	11.1	34.9	20.200	12.5	9.9	17.8	
LC	100%	6/10/2014	161	18.0	20.8	16.2	95.7	0.1	1.2	3.9	86	964.4	8499939	18.9	21.88	21.86	21.91	21.17	16.18	12.72	10.40	9.11	6.76	6.1	5.95	11.2	36.0	20.300	12.5	10.2	15.8	
LC	100%	6/11/2014	162	16.3	19.1	14.4	95.2	0.9	2.2	7.7	117	967.2	3435915	7.9	21.41	21.45	21.55	21.25	16.26	12.72	10.40	9.10	6.76	6.1	5.94	11.1	33.8	21.200	12.5	10.4	14.5	
LC	100%	6/12/2014	163	16.5	19.2	14.1	95.7	3.7	2.0	8.5	143	965.5	6553374	14.6	20.57	20.62	20.71	20.64	16.30	12.76	10.40	9.12	6.77	6.1	5.95	11.1	32.6	24.900	12.5	10.5	15.6	
LC	100%	6/13/2014	164	19.6	25.2	16.6	92.6	4.7	1.2	8.3	149	959.5	13078968	27.5	21.19	20.80	20.73	20.47	16.67	12.88	10.48	9.17	6.80	6.1	5.96	11.2	62.3	72.800	12.5	11.2	26.9	
LC	100%	6/14/2014	165	14.5	16.7	12.8	80.4	0.0	2.7	9.8	319	963.9	14729526	29.8	20.82	20.82	20.86	20.63	17.10	13.07	10.53	9.24	6.80	6.1	5.99	11.2	94.1	72.800	12.5	11.0	19.3	
LC	100%	6/15/2014	166	15.9	22.0	10.9	72.6	0.0	2.3	8.7	297	969.1	30437100	20.6	20.65	20.61	20.62	20.05	17.66	13.15	10.56	9.25	6.88	6.1	6.00	11.2	92.8	72.800	12.5	10.9	15.6	
LC	100%	6/16/2014	167	19.6	27.3	9.7	69.4	3.7	1.2	9.9	240	969.2	28769637	59.4	22.56	21.40	21.07	20.42	17.97	13.23	10.61	9.25	6.89	6.1	6.01	11.2	89.5	76.500	12.6	10.9	15.4	
LC	100%	6/17/2014	168	23.8	29.0	18.2	71.1	0.0	1.8	9.8	248	966.2	27900400	58.1	24.39	23.09	21.79	20.66	17.98	13.37	10.60	9.29	6.90	6.1	6.03	11.2	89.3	76.500	12.6	11.5	21.1	
LC	100%	6/18/2014	169	23.6	26.8	19.4	66.2	0.0	2.7	10.0	289	963.8	25675681	53.3	24.35	24.20	23.57	20.98	17.99	13.47	10.64	9.30	6.93	6.1	6.06	11.2	82.9	76.500	12.6	11.5	15.1	
LC	100%	6/19/2014	170	19.4	23.9	15.1	77.3	8.7	1.7	6.9	279	966.1	15360363	23.1	24.31	24.26	24.30	21.24	17.98	13.56	10.73	9.28	6.91	6.2	6.07	11.2	85.5	80.200	12.5	11.1	24.2	
LC	100%	6/20/2014	171	16.5	21.8	9.9	56.4	0.0	2.4	8.4	282	965.7	30718238	61.8	23.39	23.36	23.43	21.62	18.03	13.59	10.72	9.31	6.96	6.2	6.07	11.2	81.0	85.200	12.5	12.2	14.1	
LC	100%	6/21/2014	172	16.3	21.9	8.6	63.3	0.0	1.3	5.8	210	963.5	29200988	59.5	23.65	23.42	23.10	22.43	18.12	13.73	10.75	9.31	6.93	6.2	6.08	11.2	73.3	85.200	12.6	10.9	13.4	
LC	100%	6/22/2014	173	17.3	23.9	9.6	69.0	0.0	1.1	5.6	193	964.4	27235442	45.5	24.11	23.80	23.28	22.38	18.20	13.80	10.76	9.34	6.92	6.08	6.1	6.02	11.2	69.9	85.200	12.6	10.9	13.6
LC	100%	6/23/2014	174	19.6	23.4	13.9	73.4	0.0	1.4	5.6	203	968.3	16520858	33.8	23.84	23.70	23.59	22.54	18.23	13.87	10.78	9.33	6.97	6.2	6.11	11.2	61.2	85.200	12.5	11.0	12.9	
LC	0%	6/24/2014	175	19.5	19.5	19.5	66.6	0.0	1.7	3.2	213	969.2	3	0.0	23.48	23.48	23.47	22.41	18.52	13.77	10.65	9.41	6.90	6.2	6.11	11.2	58.4	85.200	12.6	10.4	12.4	
LC	100%	6/25/2014	176	23.4	26.6	20.0	81.8	9.6	2.0	8.1	220	961.9	17700188	37.2	24.06	23.84	23.61	22.75	18.37	13.95	10.88	9.34	6.97	6.2	6.12	11.2	51.8	94.800	12.6	14.6	19.9	
LC	100%	6/26/2014	177	20.9	24.9	18.3	81.9	4.1	2.2	6.8	295	962.8	16864904	35.4	24.07	24.04	24.10	22.86	18.48	14.13	10.90	9.35	6.99	6.2	6.14	11.2	59.9	99.900	12.5	13.4	26.3	
LC	100%	6/27/2014	178	20.5	26.1	14.8	70.3	0.0	1.1	5.8	160	969.4	28096460	57.9	24.91	24.58	24.08	23.24	18.59	14.18	10.90	9.36	6.98	6.3	6.15	11.2	55.2	98.900	12.5	12.6	17.4	
LC	100%	6/28/2014	179	21.0	25.8	15.7	71.9	0.0	1.1	4.6	191	973.7	22685081	46.4	25.57	25.20	24.70	23.42	18.70	14.24	10.95	9.39	6.98	6.3	6.15	11.2	49.5	98.900	12.5	12.3	15.1	
LC	100%	6/29/2014	180	21.8	25.7	16.3	70.2	0.0	1.6	6.3	220	971.7	23809869	49.1	25.55	25.45	25.13	23.57	18.77	14.31	10.96	9.39	6.99	6.3	6.15	11.2	37.7	99.100	12.5	12.8	14.5	
LC	100%	6/30/2014	181	22.2	26.2	19.7	68.6	0.2	1.6	5.5	219	966.5	17692748	37.5	25.39	25.28	25.24	23.71	18.85	14.34	10.97	9.40	7.01	6.3	6.15	11.1	37.7	99.100	12.5	12.5	14.5	

Lake water & energy budget daily summary from hourly data (negative values: loss from lake; runoff & seepage term is residual after adjusting lake level for all others)