

AIR QUALITY DATA SUMMARY FOR ACADIA NATIONAL PARK

Prepared by Bob Breen and Michael Fraser, Acadia National Park

YEAR:	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
GROUND-LEVEL OZONE POLLUTION: Data collected from McFarland Hill (elevation: 400 feet)																	
Annual 1-Hour Max. O ₃ Conc.(ppb) Avg:120.3	55	138	140	120	109	130	179	130	123	128	108	112	102	128	102		
Date of Episode (month)		Aug.	June	July	July	Aug.	June	Sept.	July	Aug.	June	Aug.	July	Aug.	Aug.		
Avg. Daily 1-hr. Max. May 1-Sep. 30 (ppb) Avg:47.64		56	54	51	47	49	62	46	44	44	40	42	43	49	40		
Daily Avg. May 1-Sep.30 (ppb.) Avg:35.36		41	39	38	34	36	44	36	35	34	30	33	33	35	27		
# of hrs. >81 ppb (hrs per year) Avg:57		98	85	61	38	41	219	24	45	79	32	39	11	67	16		
# of days w/ hour>81 ppb Avg:12.6		20	24	19	8	9	32	4	10	15	8	11	7	16	6		
# of hrs. Conc.> 60 ppb (hrs per year)(May-Sep.)Avg:285		456	376	331	174	227	590	260	316	334	184	181	186	263	114		
GROUND-LEVEL OZONE POLLUTION: Data collected from Cadillac Mountain (elevation 1530 feet)																	
Annual 1-Hour Max. O ₃ Conc.(ppb) Avg:														134	100		
Date of Episode (month)															Aug.		
Avg. Daily 1-hr. Max. May 1-Sep. 30 (ppb) Avg:															54		
Daily Avg. May 1-Sep.30 (ppb.) Avg:															41		
# of hrs. >81 ppb (hrs per year) Avg:														15	52		
# of days w/ hour>81 ppb Avg:														5	16		
# of hrs. Conc.> 60 ppb (hrs per year)(May-Sep.)															408		
ACID-DEPOSITION: Data collected from McFarland Hill																	
Annual Precip. (Jan.1 - Dec. 31)inches Avg:55.82	48.19	76.20	56.28	43.76	55.04	50.60	52.49	56.08	60.30	56.02	47.98	58.59	56.85	58.54	60.36		
Avg. Acidity of Rainfall Avg:4.57	4.49	4.71	4.59	4.39	4.49	4.60	4.56	4.54	4.51	4.62	4.50	4.62	4.66	4.66	4.64		
Lowest Acidity of Rainfall Avg:3.72	3.58	3.70	3.20	3.80	3.80	3.50	3.40	3.60	3.70	4.00	3.78	3.95	3.90	3.86	4.03		
Annual Wet SO ₄ Conc. Avg:1.44	1.85	1.19	1.54	1.81	1.69	1.31	1.47	1.48	1.48	1.16	1.48	1.14	1.10	1.11	0.98		
Annual Wet NO ₃ Conc. Avg:0.81	0.91	0.54	0.77	1.03	0.87	0.68	0.75	0.88	0.95	0.69	1.02	0.76	0.63	0.72	0.70		
Annual Wet SO ₄ Deposition Avg:19.9	22.67	23.01	22.04	20.16	23.65	16.82	19.53	21.11	22.68	16.46	18.05	16.92	15.94	16.52	14.95		
Annual Wet NO ₃ Deposition Avg:11.1	11.10	10.43	11.01	11.49	12.20	8.69	9.97	12.46	14.57	9.79	12.40	11.34	9.08	10.63	10.70		
PARTICULATE MATTER AND VISIBILITY: Data collected from McFarland Hill																	
Summer PM <10 microns(micrograms/m ³) Avg:13.7							15.8	12.5	18.5	14.3	10.5	12.5	14.2	12.7	12.8	13.2	
Summer PM <2.5 microns(micrograms/m ³) Avg:8.3							9.6	9.5	7.8	8.1	6.8	7.9	9.8	8.1	8.1	6.9	
Summer SO ₄ Conc. (micrograms/m ³) Avg:4.4							4.4	4.9	4.1	4.0	3.9	4.5	6.0	4.0	5.0	3.5	
Summer NO ₃ Conc. (micrograms/m ³) Avg:0.3							0.4	0.2	0.4	0.2	0.3	0.4	0.3	0.3	0.3	0.2	
Summer Standard Visual Range-10% Best Days (miles)Avg:68.8							68.0	63.8	55.6	68.0	70.6	76.3	65.0	76.9	75.0		
Summer Standard Visual Range-Median (miles)Avg:34.3							25.6	31.3	42.5	40.6	38.1	43.8	25.6	30.6	30.6		
Summer Standard Visual Range 10% Worst Days(miles)Avg:14.0							12.5	13.1	13.1	17.5	15.6	11.9	13.8	15.0	13.8		
Annual Standard Visual Range-10% Best Days (miles)Avg:71.1							66.5	59.6	59.0	63.4	75.8	68.9	78.3	78.9	86.3	73.9	
Annual Standard Visual Range- Median (miles)Avg:40.2							39.8	31.7	37.3	36.6	41.0	39.8	39.8	46.0	43.5	46.0	
Annual Standard Visual Range- 10% Worst Days(miles)Avg:17.5							16.8	15.5	18.6	18.0	16.1	15.5	15.5	19.9	18.6	20.5	

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