NOTES ON THE MORTALITY AMONG FISHES OF THE GULF OF MEXICO.

Prof. SPENCER F. BAIRD, *U. S. Commissioner of Fish and Fisheries, Washington, D, C.:*

SIR: Noticing in the Forest and Stream of 9th instant some answers to queries as to the cause of mortality among fishes in the Gulf of Mexico, I make bold to present the result of my observations.

After very heavy rains and overflowing of rivers, the inner bays on the Texas coast suffer a loss of from one-half to three-fourths of their stock of salt water fish, not including mullet, which live as well in fresh as salt water. In fact land-locked mullet in a fresh water pond or tank grow to a weight of nine or ten pounds.

Last winter, after a heavy rain and a freeze, *all* the salt water fish in the *Laguna del Madre* (a large sheet of water lying between Padre Island and the mainland) were found dead on the banks.

We have two causes for the destruction of fish here, vis., too much fresh water and too cold weather.

In the lagoon above spoken of, in a long drought, the water gets too salty for the fish, and they become covered with sores, and unless relieved by a rain they die from too much salt.

I have never known any serious mortality among fish on the Gulf coast where there was a free flow of water, except during violent storms, when many fish both small and large were beached and killed.

Very respectfully,

S. H. JOHNSON.

CORPUS CHRISTI, Texas, *June* 17, 1881.

ANGLO-AMERICAN ARCTIC EXPEDITION.

Commander Cheyne's paper, describing his proposed Arctic expedition in conjunction with Lieut. Schwatka, read before the N. Y. Academy of Sciences, on the 28th ultimo, will be printed in our next issue, with the regular proceedings of the Academy. We understand that Commander Cheyne is receiving a strong support from those interested in the subject, and that there is an early prospect of his plans taking a definite form.

The English Arctic Council for the organization of this expedition, meet on the 13th instant, and are awaiting a cablegram, informing them of the prospects of success, for international co-operation.

ADVICE TO ASTRONOMERS.—In Sir William Herschel's work "*On the Construction of the Heavens*," the following line of conduct for astronomers is indicated: "in an investigation of this delicate nature we ought to avoid two opposite extremes. If we indulge a fanciful imagination and build worlds of our own, we must not wonder at our going wide from the path of truth and nature. On the other hand, if we add observation to observation, without attempting to draw not only certain conclusions but also conjectural views from them, we offend against the very end for which only observations ought to be made. I will endeavor to keep a proper medium, but if I should deviate from that I could trust not to fall into the latter error.—*See Holden's and Hasting's Synopsis.*

METEOROLOGICAL REPORT FOR NEW YORK CITY FOR THE WEEK ENDING DEC. 3, 1881.

Latitude 40° 45′ 58″ N.; Longitude 73° 57′ 58″ W.; height of instruments above the ground, 53 feet; above the sea, 97 feet; by self-recording instruments.

NOVEMBER AND DECEMBER.	BAROMETER. MEAN FOR THE DAY. Reduced to Freezing.	BAROMETER. MAXIMUM. Reduced to Freezing.	BAROMETER. MAXIMUM. Time.	BAROMETER. MINIMUM. Reduced to Freezing.	BAROMETER. MINIMUM. Time.	THERMOMETERS. MEAN. Dry Bulb.	THERMOMETERS. MEAN. Wet Bulb.	THERMOMETERS. MAXIMUM. Dry Bulb.	THERMOMETERS. MAXIMUM. Time.	THERMOMETERS. MAXIMUM. Wet Bulb.	THERMOMETERS. MAXIMUM. Time.	THERMOMETERS. MINIMUM. Dry Bulb.	THERMOMETERS. MINIMUM. Time.	THERMOMETERS. MINIMUM. Wet Bulb.	THERMOMETERS. MINIMUM. Time.	MAXI'M In Sun
Sunday, 27	29.939	30.016	7 a. m.	29.848	6 p. m.	43.0	38.3	50	4 p. m.	43	7 p. m.	35	7 a. m.	33	7 a. m.	103.
Monday, 28	30.345	30.398	9 p. m.	29.976	0 a. m.	30.0	27.3	48	0 a. m.	43	0 a. m.	27	9 a. m.	25	9 a. m.	96.
Tuesday, 29	30.204	30.374	0 a. m.	30.098	12 p. m.	40.0	36.6	49	4 p. m.	45	7 p. m.	28	6 a. m.	27	6 a. m.	95.
Wednesday, 30	30.026	30.098	0 a. m.	29.908	12 p. m.	47.0	44.7	54	3 p. m.	49	3 p. m.	37	9 a. m.	37	9 a. m.	103.
Thursday, 1	29.754	30.082	12 p. m.	29.518	1 p. m.	49.3	47.3	56	4 p. m.	52	12 m.	43	12 p. m.	40	12 p. m.	69.
Friday, 2	30.284	30.306	9 a. m.	30.082	0 a. m.	39.3	35.7	44	3 p. m.	40	0 a. m.	36	7 a. m.	34	7 a. m.	104.
Saturday, 3	30.131	30.272	0 a. m.	30.088	6 p. m.	38.0	36.0	40	3 p. m.	38	3 p. m.	35	5 a. m.	33	5 a. m.	76.

		Dry.	Wet.
Mean for the week	30.097 inches.	40.9 degrees	37.9 degrees.
Maximum for the week	at 9 p. m., Nov. 28th 30.398 "	at 4 pm., Dec. 1st 56. "	at 12 m 1st, 52. "
Minimum "	at 1 p. m., Dec. 1st 29.518 "	" 9 am., Nov. 28th 27. "	at 9 am 28th, 25. "
Range	.880 "	29. "	27. "

NOVEMBER AND DECEMBER.	WIND. DIRECTION. 7 a. m.	2 p. m.	9 p. m.	VELOCITY IN MILES. Distance for the Day.	FORCE IN LBS. PER SQR. FEET. Max.	Time.	HYGROMETER. FORCE OF VAPOR. 7 a. m.	2 p. m.	9 p. m.	RELATIVE HUMIDITY. 7 a. m.	2 p. m.	9 p. m.	CLOUDS. CLEAR, 0 OVERCAST. 10 7 a. m	2 p. m.	9 p. m.	RAIN AND SNOW. DEPTH OF RAIN AND SNOW IN INCHES. Time of Beginning.	Time of Ending.	Duration. h. m.	Amount of water	OZONE.
Sunday, 27	w. s. w.	w. s. w.	w. s. w.	278	8	1.30 pm	.162	.143	.215	80	42	69	0	4 cir. cu.	8 cu.	-----	-----	----	--	8
Monday, 28	n.	n.	e. s. e.	204	9	0.50 am	.136	.101	.119	88	58	68	0	0	0	-----	-----	-----	--	0
Tuesday, 29	n. n. e.	s. w.	w.	31	¼	1 30 pm	.124	.179	.241	77	55	83	0	8 cu.	5 cu.	-----	-----	-----	--	0
Wednesday, 30	w. s. w.	w. s. w.	s. s. e.	58	¼	3.00 am	.238	.245	.321	100	65	86	10	2 cir.	10	9.30 pm	12 pm	2.30	.01	0
Thursday, 1	e.	w.	n. w.	184	18½	7.30 pm	.309	.362	.241	85	87	83	10	10	0	0 am	3 pm	15.00	.51	6
Friday, 2	n. w.	n. e.	e.	141	3¼	3.00 am	.170	.142	.173	80	51	72	1 cir.	5 cir.	0	-----	-----	-----	--	2
Saturday, 3	e. n. e.	n. n. e.	n. n. e.	138	2¼	10.40 am	.149	.203	.207	70	82	90	5 cir. cu.	10	10	8.30 pm	12 pm	3.30	.01	10

Distance traveled during the week	1,034 miles.	Total amount of water for the week	.53 inch.
Maximum force	18½ lbs.	Duration of rain	21 hours, 00 minutes.

DANIEL DRAPER, Ph. D.

Director Meteorological Observatory of the Department of Public Parks, New York.