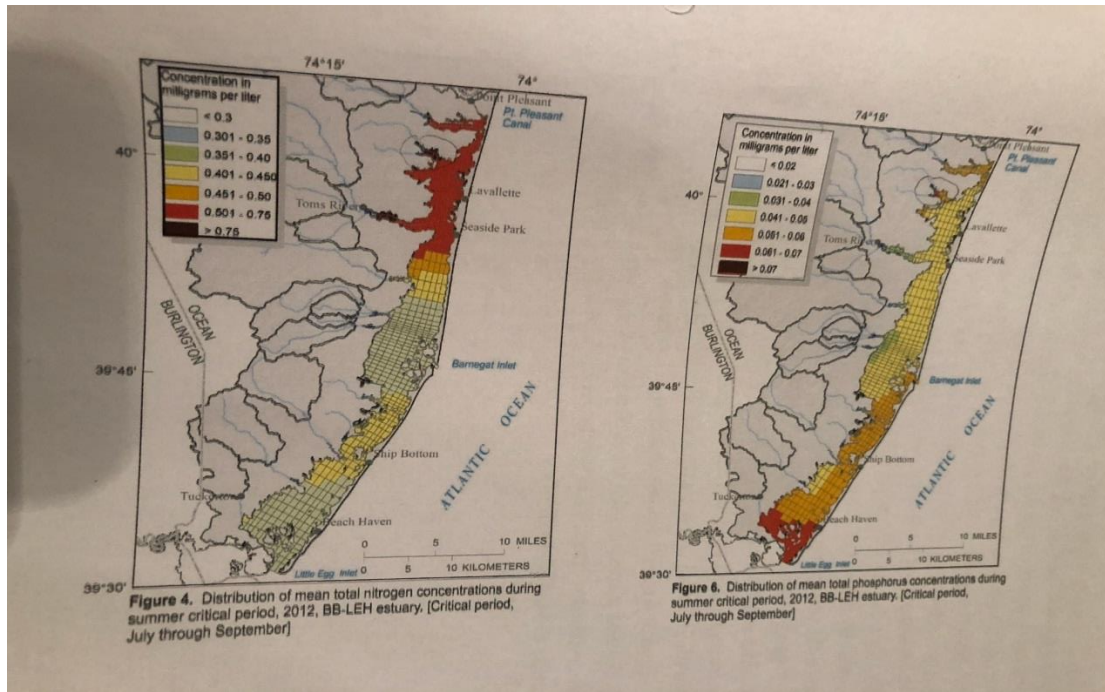


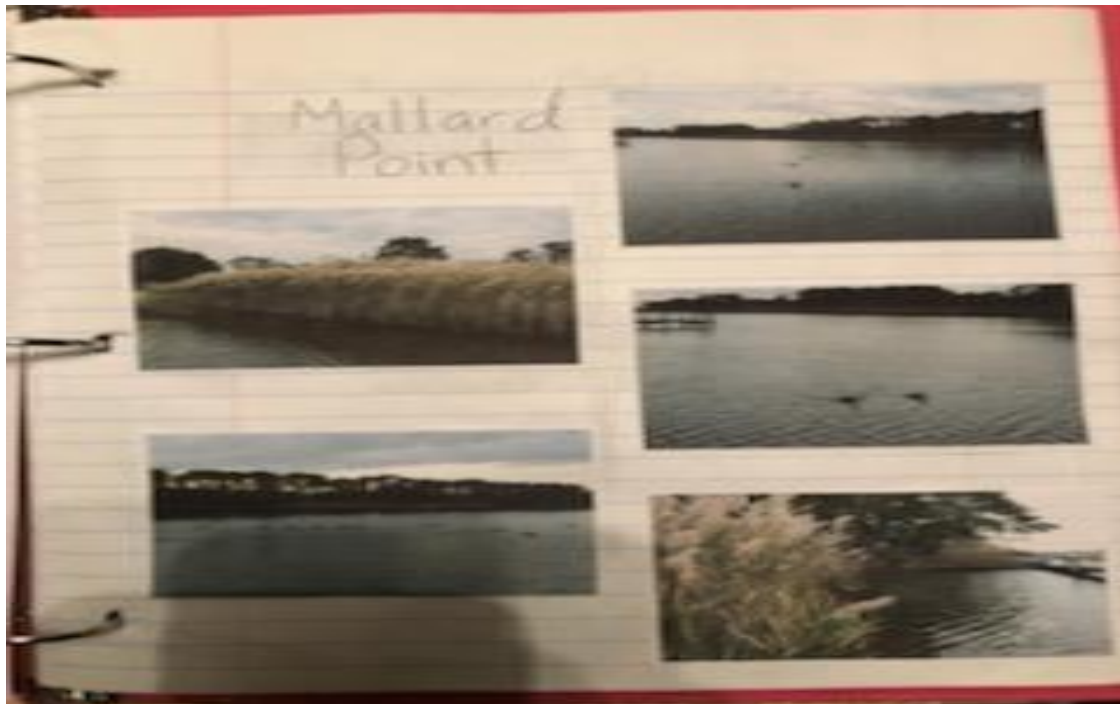
**Can Duckweed Lower the
Levels of Nitrates and
Phosphates from the Polluted
Waters of the Barnegat Bay?**

Laboratory Notebook

Distribution of Nitrogen Concentration and Phosphate Concentration

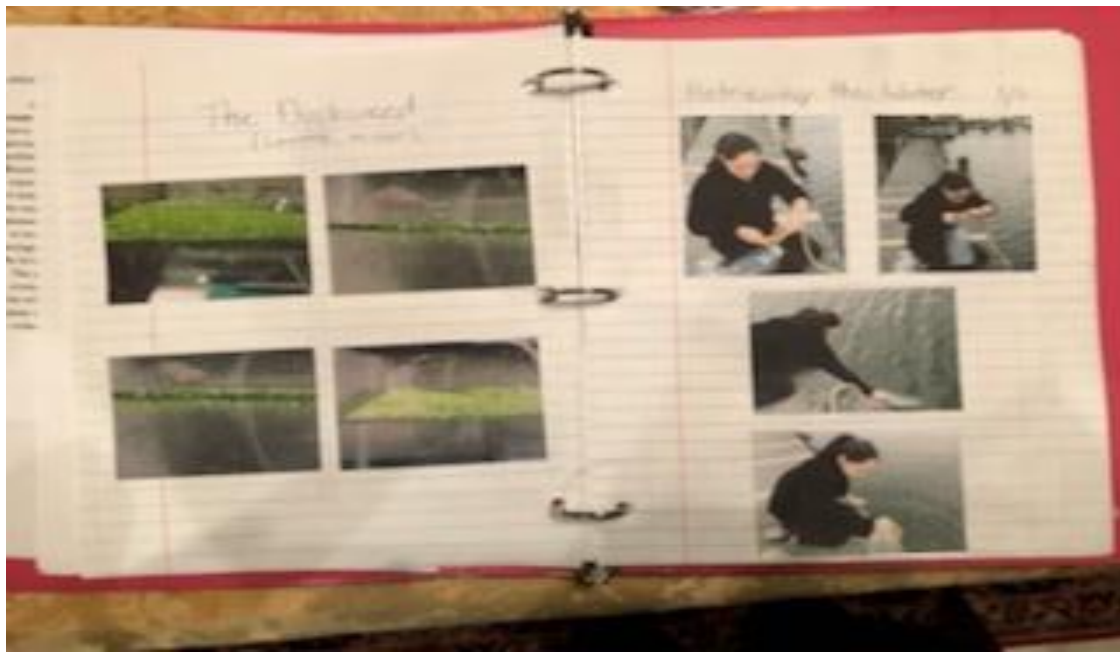


Water Collection at Mallard Point in Brick, NJ



Duckweed (Lemna minor)

11/05/19: Water Collection



Starting the Experiment / Equipment

Day 1: 11/05/19



Day 3: 11/07/19



Day 5: 11/09/19



Day 7: 11/11/19



Day 9: 11/13/19



Day 15: 11/19/19

Date	Time	Temp	Wind	Humidity
11/19/19	08:00	65	10	70
11/19/19	09:00	68	12	72
11/19/19	10:00	70	15	75
11/19/19	11:00	72	18	78
11/19/19	12:00	75	20	80
11/19/19	13:00	78	22	82
11/19/19	14:00	80	25	85
11/19/19	15:00	82	28	88
11/19/19	16:00	85	30	90
11/19/19	17:00	88	32	92

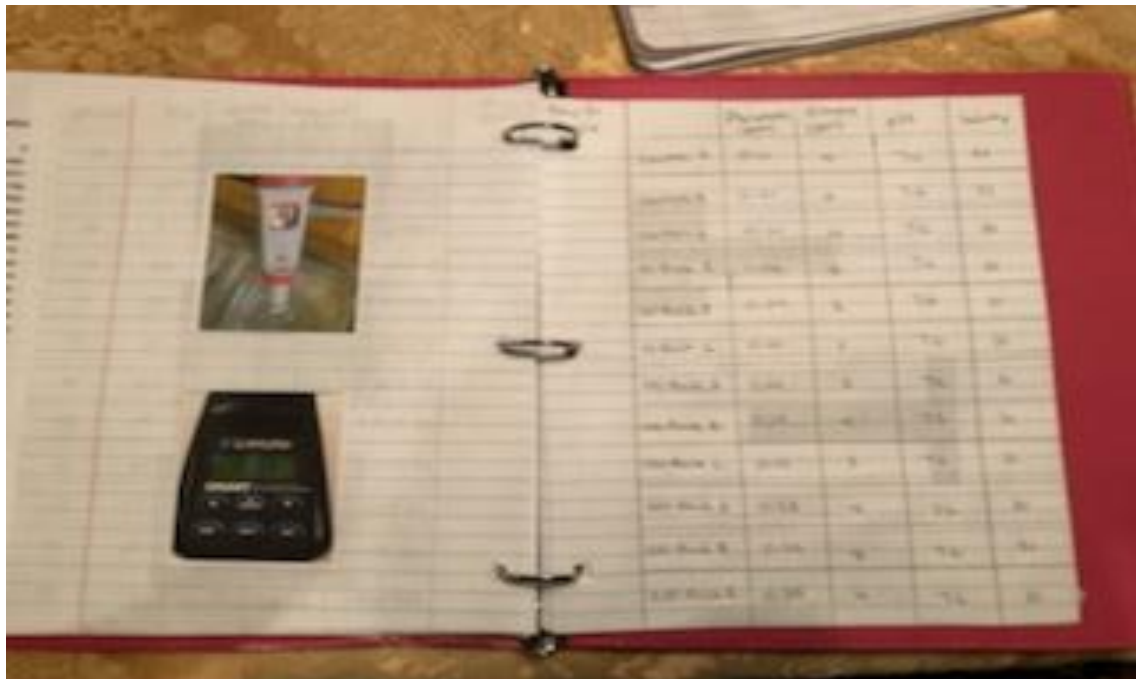
Day 17: 11/21/19

Date	Time	Temp	Wind	Humidity
11/21/19	08:00	65	10	70
11/21/19	09:00	68	12	72
11/21/19	10:00	70	15	75
11/21/19	11:00	72	18	78
11/21/19	12:00	75	20	80
11/21/19	13:00	78	22	82
11/21/19	14:00	80	25	85
11/21/19	15:00	82	28	88
11/21/19	16:00	85	30	90
11/21/19	17:00	88	32	92

Day 19: 11/23/19



Day 21: 11/25/19



Additional Experiment: Duckweed As Fertilizer



Dates: 12/08/19, 12/09/19, 12/10/19

The notebook page shows a data table with the following structure:

0 Duckweed		
Date	Plant Height	Number of Duckweed
12/08/19	2.5	0
12/09/19	3.5	0
12/10/19	4.5	0
12/11/19	5.5	0
12/12/19	6.5	0
12/13/19	7.5	0
12/14/19	8.5	0
12/15/19	9.5	0
12/16/19	10.5	0
12/17/19	11.5	0
12/18/19	12.5	0
12/19/19	13.5	0
12/20/19	14.5	0
12/21/19	15.5	0
12/22/19	16.5	0
12/23/19	17.5	0
12/24/19	18.5	0
12/25/19	19.5	0
12/26/19	20.5	0
12/27/19	21.5	0
12/28/19	22.5	0
12/29/19	23.5	0
12/30/19	24.5	0
12/31/19	25.5	0
10 Duckweed		
Date	Plant Height	Number of Duckweed
12/08/19	2.5	10
12/09/19	3.5	10
12/10/19	4.5	10
12/11/19	5.5	10
12/12/19	6.5	10
12/13/19	7.5	10
12/14/19	8.5	10
12/15/19	9.5	10
12/16/19	10.5	10
12/17/19	11.5	10
12/18/19	12.5	10
12/19/19	13.5	10
12/20/19	14.5	10
12/21/19	15.5	10
12/22/19	16.5	10
12/23/19	17.5	10
12/24/19	18.5	10
12/25/19	19.5	10
12/26/19	20.5	10
12/27/19	21.5	10
12/28/19	22.5	10
12/29/19	23.5	10
12/30/19	24.5	10
12/31/19	25.5	10
20 Duckweed		
Date	Plant Height	Number of Duckweed
12/08/19	2.5	20
12/09/19	3.5	20
12/10/19	4.5	20
12/11/19	5.5	20
12/12/19	6.5	20
12/13/19	7.5	20
12/14/19	8.5	20
12/15/19	9.5	20
12/16/19	10.5	20
12/17/19	11.5	20
12/18/19	12.5	20
12/19/19	13.5	20
12/20/19	14.5	20
12/21/19	15.5	20
12/22/19	16.5	20
12/23/19	17.5	20
12/24/19	18.5	20
12/25/19	19.5	20
12/26/19	20.5	20
12/27/19	21.5	20
12/28/19	22.5	20
12/29/19	23.5	20
12/30/19	24.5	20
12/31/19	25.5	20

Dates: 12/11/19, 12/12/19, 12/13/19, 12/14/19, 12/15/19, 12/16/19

The notebook shows handwritten data for the dates 12/11/19 through 12/16/19. Each date has a table with three columns. The data is as follows:

Date	Category	Value 1	Value 2
12/11/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/12/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/13/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/14/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/15/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/16/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0

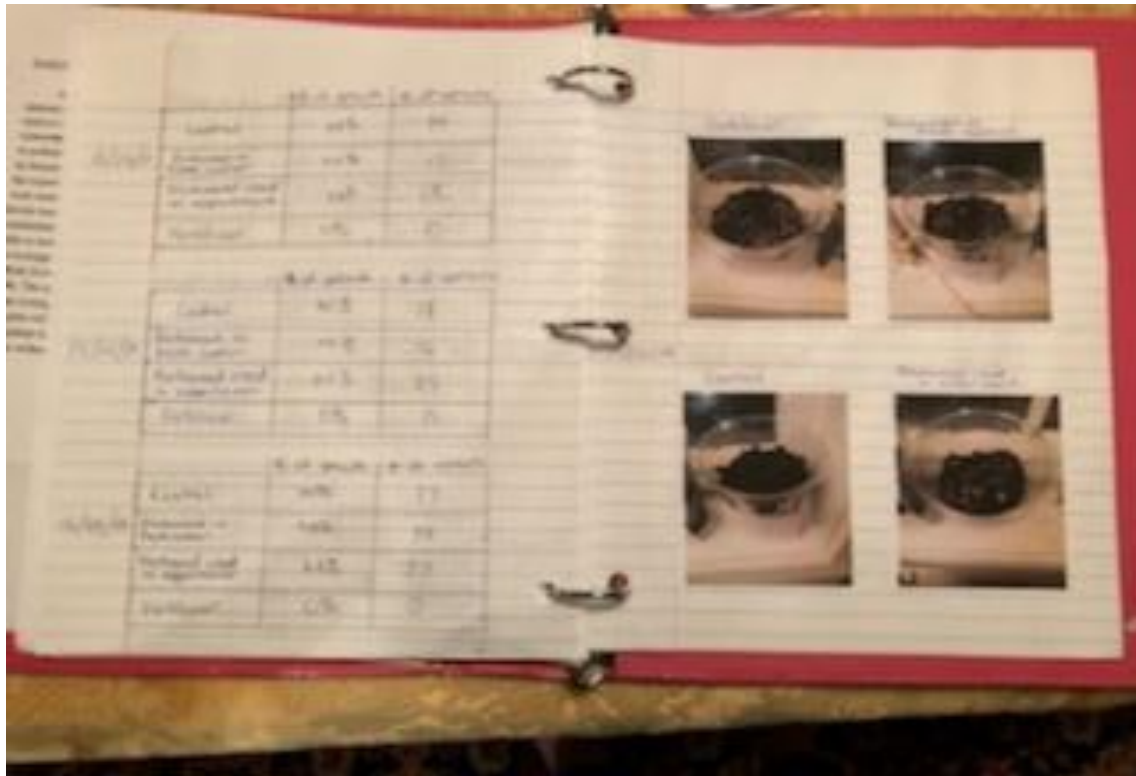
Dates: 12/17/19, 12/18/19, 12/19/19, 12/20/19, 12/21/19, 12/22/19

The notebook continues the handwritten data for the dates 12/17/19 through 12/22/19. Each date has a table with three columns. The data is as follows:

Date	Category	Value 1	Value 2
12/17/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/18/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/19/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/20/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/21/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
12/22/19	Control	0.5	0
	Control	0.5	0
	Control	0.5	0
	Control	0.5	0

Dates: 12/23/19, 12/24/19, 12/25/19

12/18/19



12/19/19

12/22/19



12/25/19

