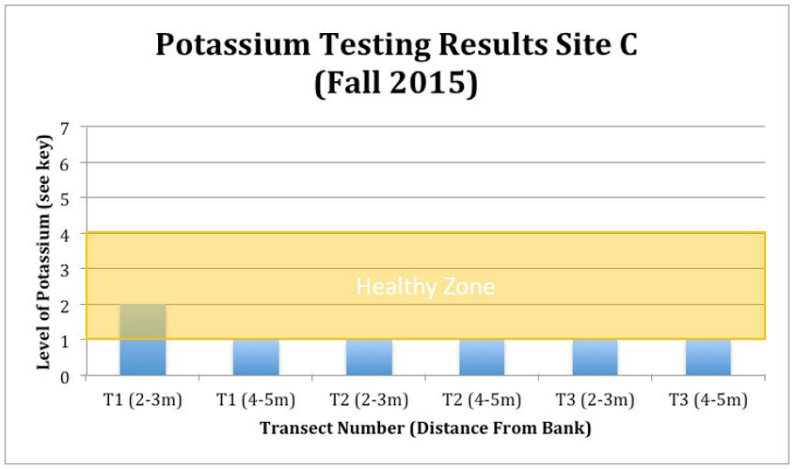
Sediments Site C Master Data Sheet
Fall Semester 2015-2016

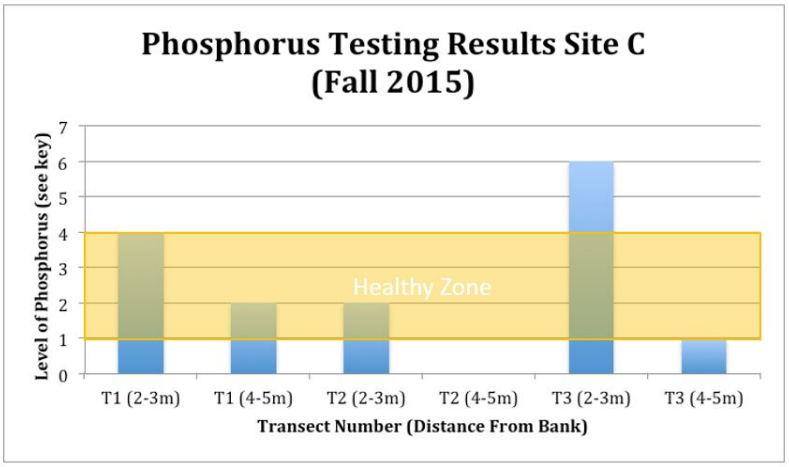
			4 mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Transect	Dist. from N Bank (m)	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	**Total (g)**
1	1	2-3	1.2	0.1%	15.0	0.8%	1438.8	77.3%	398.6	21.4%	7.4	0.4%	1861.0
2	1	4-5	0	0.0%	184.6	9.9%	1318.1	70.4%	362.2	19.3%	7.5	0.4%	1872.4
3	2	2-3	49.4	2.5%	1464.4	72.7%	329.5	16.4%	163.0	8.1%	8.0	0.4%	2014.3
4	2	4-5	0	0.0%	206.9	12.5%	1125.9	68.2%	311.9	18.8%	6.8	0.4%	1651.5
5	3	2-3	8.4	0.4%	1743.6	84.4%	247.7	11.9%	64.6	3.2%	1.5	0.1%	2068.8
6	3	4-5	0	0.0%	259.9	14.7%	1264.2	71.6%	237.4	13.5%	3.5	0.2%	1765.0

	Transect	Dist. from N Bank	Corbicula	Feature	Potassium	pH	Nitrogen	Phosphorus
1	1	2-3	0	Run	Low	7.0	Trace	Medium
2	1	4-5	0	Run	Very Low	5.0	Trace	Low
3	2	2-3	0	Run	Very Low	7.0	Trace	Low
4	2	4-5	0	Pool	Very Low	7.0	Trace	Trace
5	3	2-3	0	Pool	Very Low	6.0	Trace	High
6	3	4-5	0	Pool	Very Low	6.0	Trace	Low

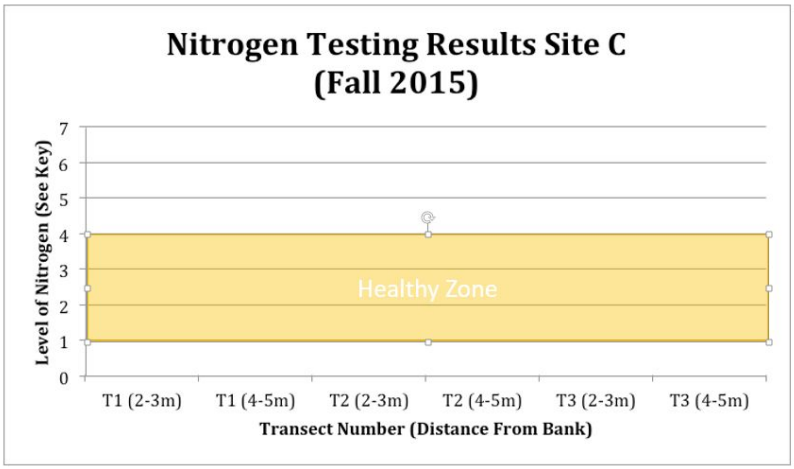
Chemical Testing Graphs



Key:
0 Trace
1 Very Low
2 Low
3 Medium Low
4 Medium
5 Medium High
6 High
7 Very High



Key:
0 Trace
1 Very Low
2 Low
3 Medium Low
4 Medium
5 Medium High
6 High
7 Very High



Key:
0 Trace
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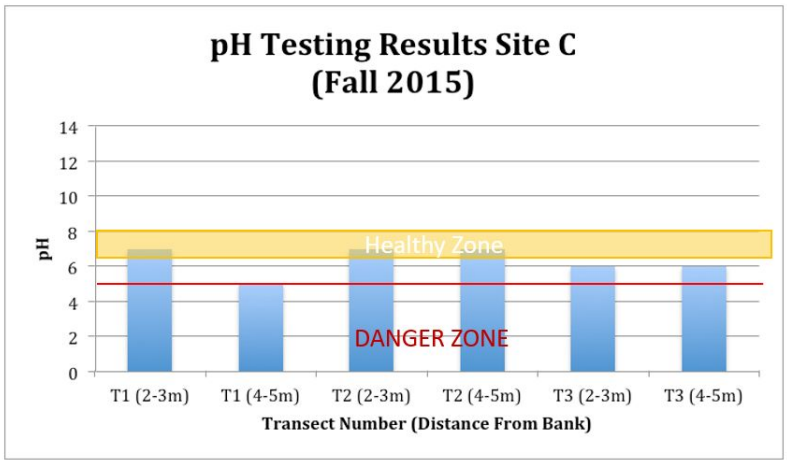
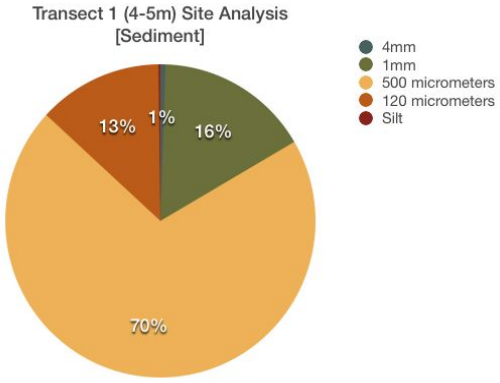
2 Low
3 Medium Low
4 Medium
5 Medium High
6 High
7 Very High

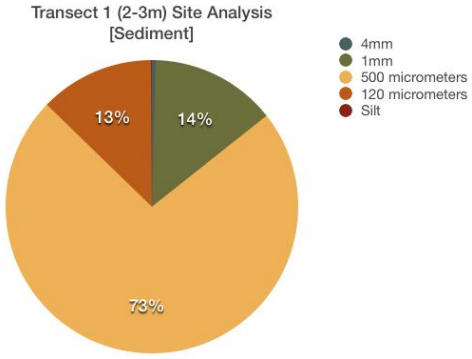


Transect 1 Site Analysis Fall 2015

			4 mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Transect	Dist. from N Bank (m)	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	**Total (g)**
1	1	2-3	5.5	0.4	185.6	13.9	971.9	72.9	168.5	12.6	1.4	0.1	1332.9
2	1	4-5	8.6	0.5	265.2	16.0	1160.4	70.2	214.2	12.9	3.3	0.2	1651.17

	Transect	Dist. from N Bank (m)	Corbicula	Feature	Potassium	pH	Nitrogen	Phosphorus
1	1	2-3	0	Run	Low	7.0	Trace	Medium
2	1	4-5	0	Run	Very Low	5.0	Trace	Low





Sediments Analysis: Silt levels have changed very little since last year, the levels have actually gone down 0.1%. There's more sediments of 500 micrometers, as they are now more than 70% of the overall sediment sample. The lower silt content is healthier for the organisms of the creek that require oxygen to survive.

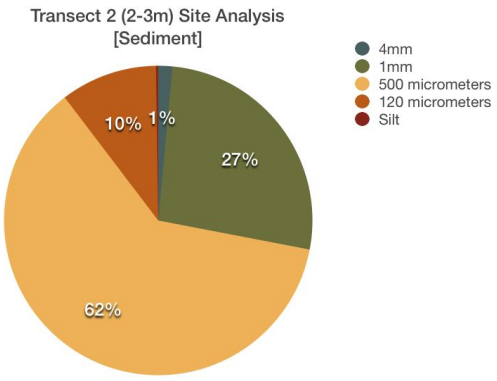
Chemical Testing: All of the chemical testing have shown the same results as last year, except for pH in that the 4-5 meters from the bank has risen to 5.0. This spike potentially indicates an area of an acid deposit. Potassium and phosphorus levels are healthy for the creek, just like last year. Nitrogen is also below healthy ranges, as it was spring 2015.

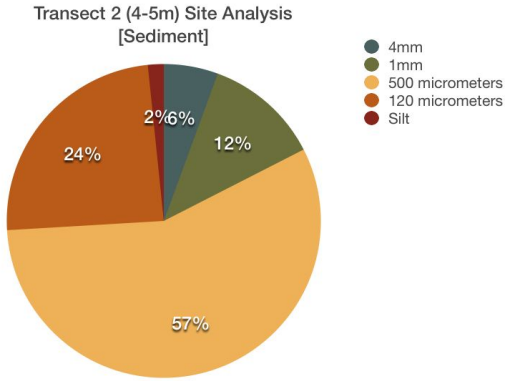
Corbicula: We did not encounter any *Corbicula* within this transect, which means the site is in a healthy condition!

Transect 2 Site Analysis Fall 2015

			4 mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Transect	Dist. from N Bank (m)	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	**Total (g)**
3	2	2-3	14.4	1.5	259.8	26.5	603.3	61.6	99.2	10.1	2.3	0.2	979
4	2	4-5	57.6	5.6	122.7	10.9	583.6	56.6	250.8	24.3	16.8	1.6	1031.5

	Transect	Dist. from N Bank	Corbicula	Feature	Potassium	pH	Nitrogen	Phosphorus
3	2	2-3	0	Run	Very Low	7.0	Trace	Low
4	2	4-5	0	Pool	Very Low	7.0	Trace	Trace





Sediments Analysis: There is a low percentage of silt at this transect in addition to an abundance of 500 micrometer sediment. Contrary to last year, this transect had much fewer 4mm pebbles than last year and instead has ~30% more 500 micrometer sediment. This fall's data indicates a healthy balance of sediments for the creek.

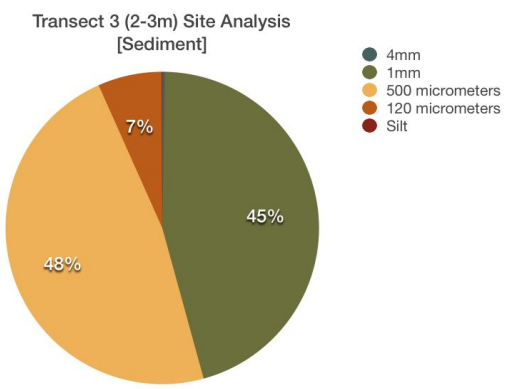
Chemical Testing: Potassium is at the bare minimum of the healthy zone, as it was last year. 4-5m has a phosphorus level below the healthy zone, whereas 2-5m is barely healthy for the creek. This is down from spring 2015, which had phosphorus at medium-low to low levels. Nitrogen levels appear to also be below the healthy zone. This is concerning as plants will not have the proper amount of nutrients to grow.

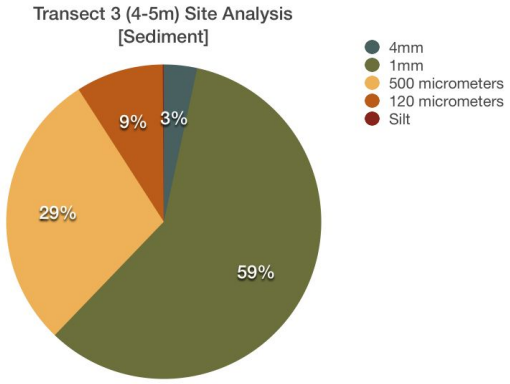
Corbicula: We did not encounter any *Corbicula* within this transect, which means the site is in a healthy condition!

Transect 3 Site C Analysis Fall 2015

			4 mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Transect	Dist. from N Bank (m)	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Total (g)
5	3	2-3	3.6	0.27	597.0	45.5	625.0	47.6	86.4	6.5	1	0.07	1313
6	3	4-5	66.3	3.4	1142.0	58.7	558.6	28.7	174.7	8.9	2.1	0.1	1943.7

	Transect	Dist. from N Bank	Corbicula	Feature	Potassium	pH	Nitrogen	Phosphorus
5	3	2-3	0	Pool	Very Low	6.0	Trace	High
6	3	4-5	0	Pool	Very Low	6.0	Trace	Low





Sediment Analysis: Unlike the other two transects, the 500 micrometer sediments are less than half and the 1mm sediments are more. prominent. It is concerning that there is also a low percentage of 4mm sediment as this reduces the available habitat for macroinvertebrates.

Chemical Testing: Potassium, pH, and nitrogen levels remain the same as last year and the Phosphorus level for 4-5m has spiked from trace to high. This is concerning as this might be a source of eutrophication, which will deny organisms oxygen due to algal blooms.

Corbicula: We did not encounter any *Corbicula* within this transect, which means the site is in a healthy condition!