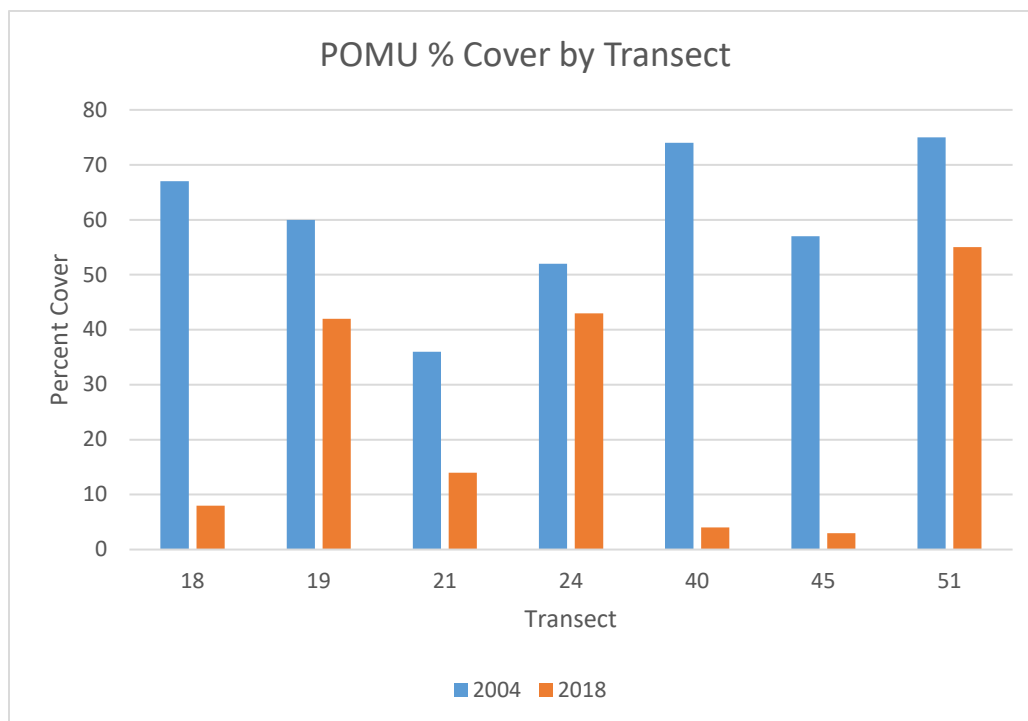
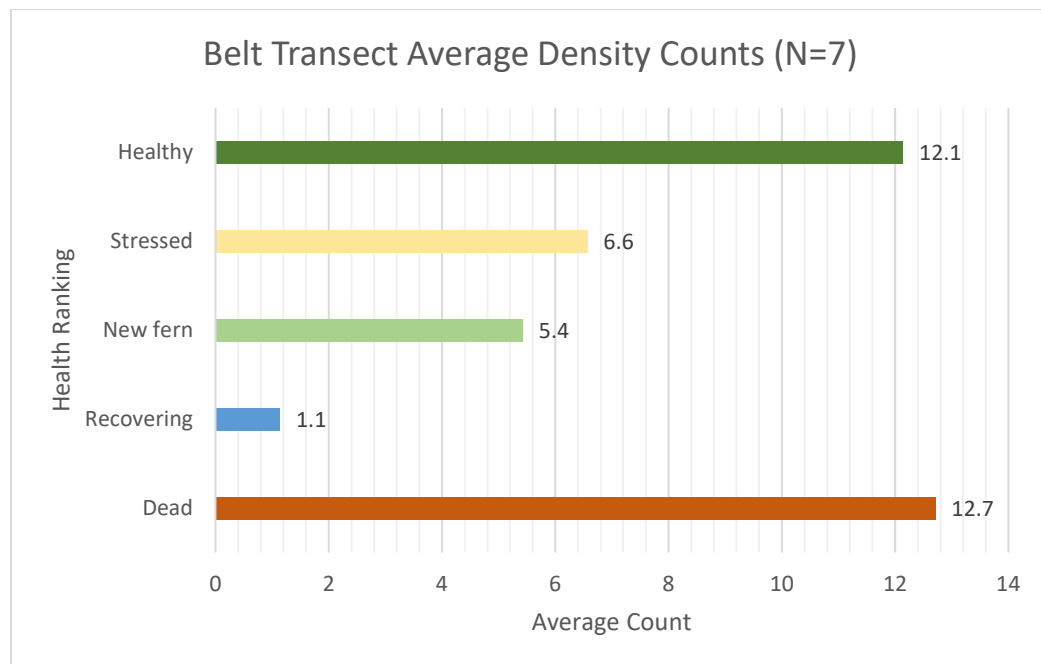


Seward Park Sword Fern Re-Monitoring Project

The purpose of this study is to determine the change in the overall extent of sword fern (*Polystichum munitum*) throughout Seward Park. We propose revisiting line-point-intercept transects that were established and inventoried in 2004 as part of the Seward Park Vegetation Management Plan. In 2004, a total of 60 50m transects were stratified across the forested/non developed areas of the peninsula. All vegetation was inventoried along these transects using the line-point-intercept method at 0.5m intervals. In order to examine how the cover of sword ferns has changes since then, we propose re-surveying these transects only for sword fern cover. In addition, we propose collecting health and mortality information along these transects to investigate possible trends in sword fern decline or reestablishment. This will entail surveying a belt transect to enumerate the number of healthy, stressed, and observable dead ferns along each of the original 50m transects. This may provide information regarding current trends and can be recollected in the future to more accurately describe declines or reestablishment of sword ferns throughout the park.







		Cover			Density Belt Transect				
					healthy	stressed	dead	recovering	new fern
Date	Plot #	2018	2004	diff	1	2	3	4	5
08/24/18	18	8	67	59	0	8	22	3	0
10/16/18	19	42	60	18	20	6	16	1	2
10/16/18	51	55	75	20	30	17	3	0	0
10/16/18	24	43	52	9	26	3	0	0	0
10/26/18	45	3	57	54	2	1	9	1	0
10/26/18	40	4	74	70	3	10	36	3	36
10/26/18	21	14	36	22	4	1	3	0	0
		24.1	60.1	-36	12.1	6.6	12.7	1.1	5.4