Experimenting with Light and Location

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Outline of Project

- 4 CDC Light traps with different color lights
- Set throughout season on same day
 - 100 ft. apart.
 - Same equipment per color
- Rotate traps every week*
- Does color of light effect counts?
- Does micro-location effect counts?



Equipment Set-Up

- Standard CDC Trap
- 1 Liter Dry Ice Cooler
- BG Lure
- 6 volt Battery

All Equipment Marked

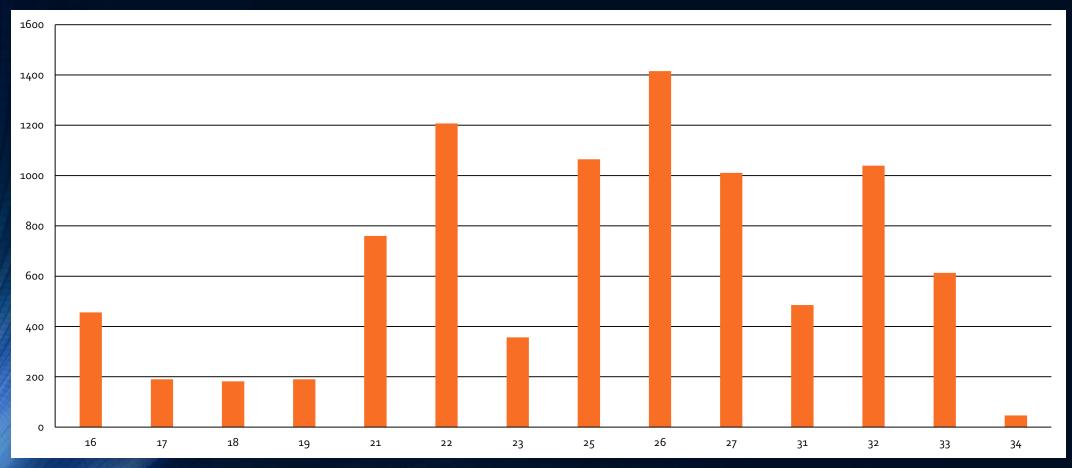


Location Detail

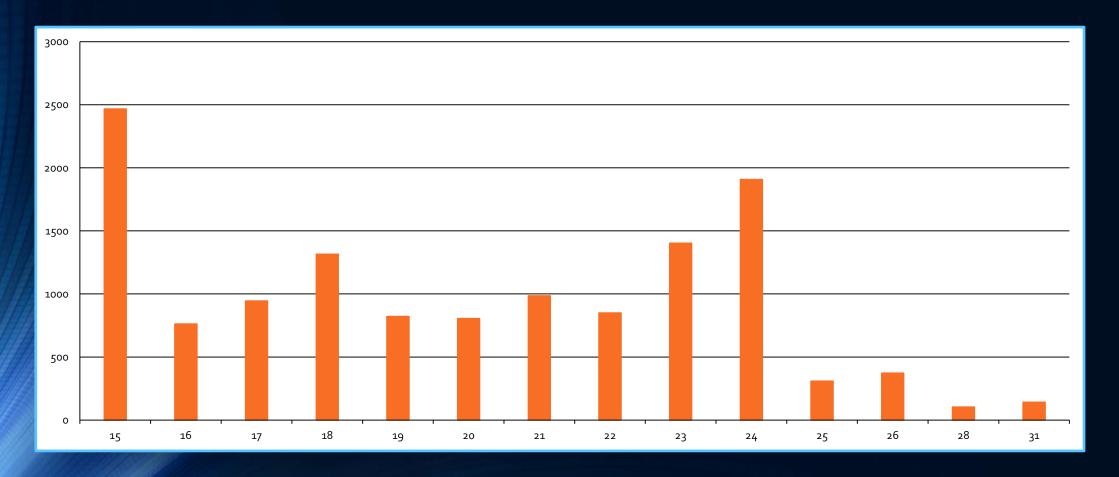
- Somewhat Unique Location in Portsmouth
 - New Suburban
 - Old Suburban
 - Abandoned Wooded Lot
 - Stormwater features throughout
- Known location with multiple species throughout the year
- Little to no foot traffic



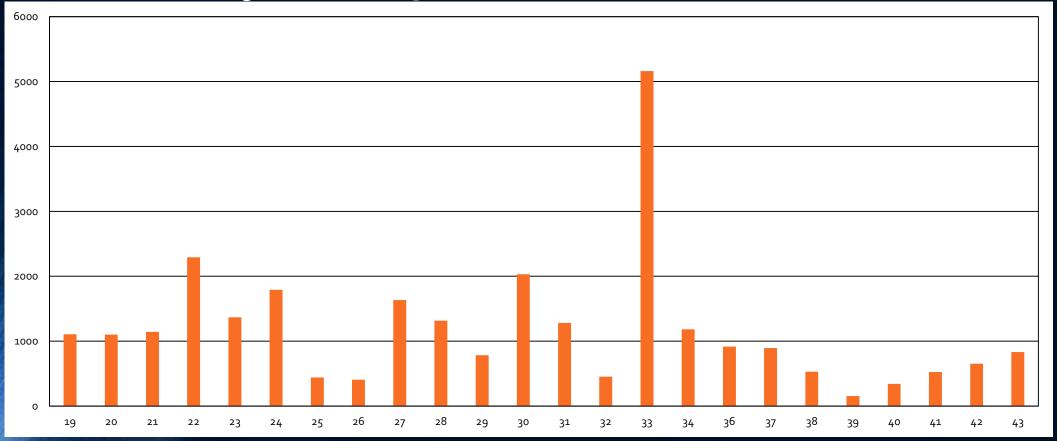
Results from Year 1



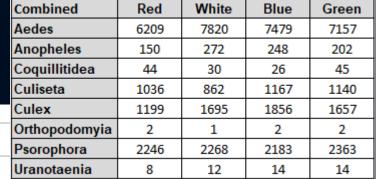
Results from Year 2

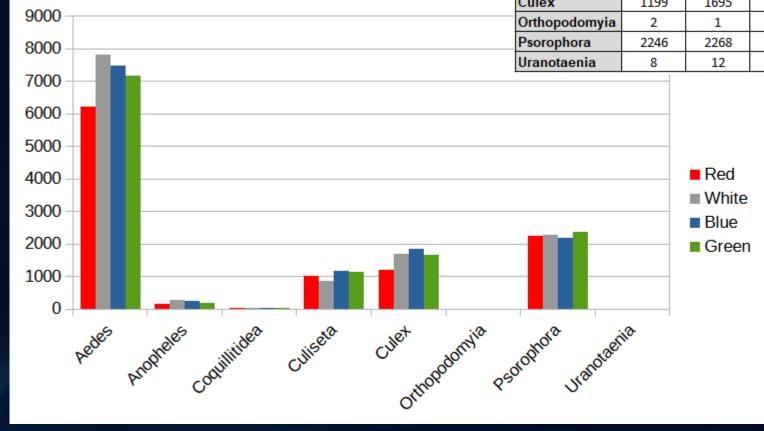


Results from Year 3



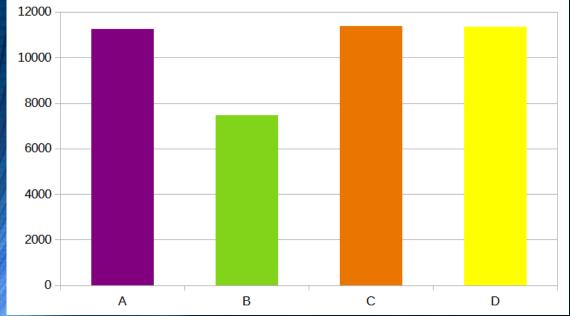
Light Summary





Location Summary

	Α	В	С	D
2022	3724	1877	3439	4145
2023	7538	5615	7962	7210
	11262	7492	11401	11355





		Α	В	С	Р
	Ae. alb	900	280	744	1234
	Ae. atl	305	350	507	280
	Ae. can	2225	651	955	1323
	Ae. cnt	0	2	0	1
	Ae. ful	0	1	1	0
	Ae. inf	2034	1711	1956	1935
	Ae. gro	1	0	0	0
	Ae. sti	3	5	4	1
	Ae. tae	1	3	7	0
	Ae. thi	0	1	0	0
	Ae. tri	114	51	79	45
	Ae. vex	1093	1235	2104	1957
	An. cru/brad		80	266	146
	An. pun	15	31	36	53
	An. qua	14	14	20	25
	Cq. per	31	9	5	48
	Cs. mel	651	380	359	1001
ı					
B	Cx. err	132	72	148	143
Ø.	Cx. pip/res	83	49	83	167
	Cx. sal	684	863	1481	1267
į	Cx. ter	3	1	2	4
ı					
ÿ	Or. sig	4	0	0	2
ø					
ğ	Ps. cil	0	1	0	0
W.	Ps. col	0	0	4	5
Z	Ps. fer	2653	1476	2148	1527
	Ps. how	38	33	43	43
	Ps. mat	0	1	0	0
Ø					
	Ur. sap	4	6	23	3
F					
	Mutilated				
	Males	187	137	412	294
	Totals	18556	12877	19001	18519



Year 2 (3) Conclusions

In the initial year, the blue and green bulbs performed better than the standard, however the past two years which have been more consistent, the standard light seems to perform as well or better than the blue and green.

The red bulb still seemed to underperform consistently.

Location definitely matters, even on a smaller scale. The location at site B is very close to newer apartments and even though it has multiple breeding sites nearby, it brings in the lowest variety and total number of mosquitoes.

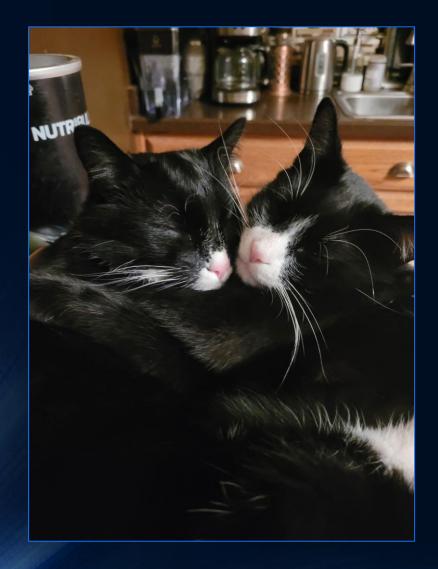
Overall site is changing per year with the addition of the Casino nearby. This will continue as current plans are to build at least one hotel in the immediate area of the study.

Future plans are to do at least one more year of the study.

Big Thanks!

- Gerald LaLiberte
- Amanda Byrd
- Randy Sykes
- Francisca Cantu
- Curtis James
- Walter Bobian
- Chelsea Putnick
- Sarah Akulin







Please contact me with any questions, ideas on improvements or if you want to look further into the raw data.

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