

Pigeon Guillemot Study 2018 Breeding Season



Guillemot Research Group
Whidbey Island, WA
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Pigeon Guillemots

- *Cephus Columba*
- Alcidae family
 - Puffins, Auklets, Murres, Murrelets
- Native to the Pacific NW
- Remain in Puget Sound area year round
- Feed on fish and other invertebrates
- Nest in burrows



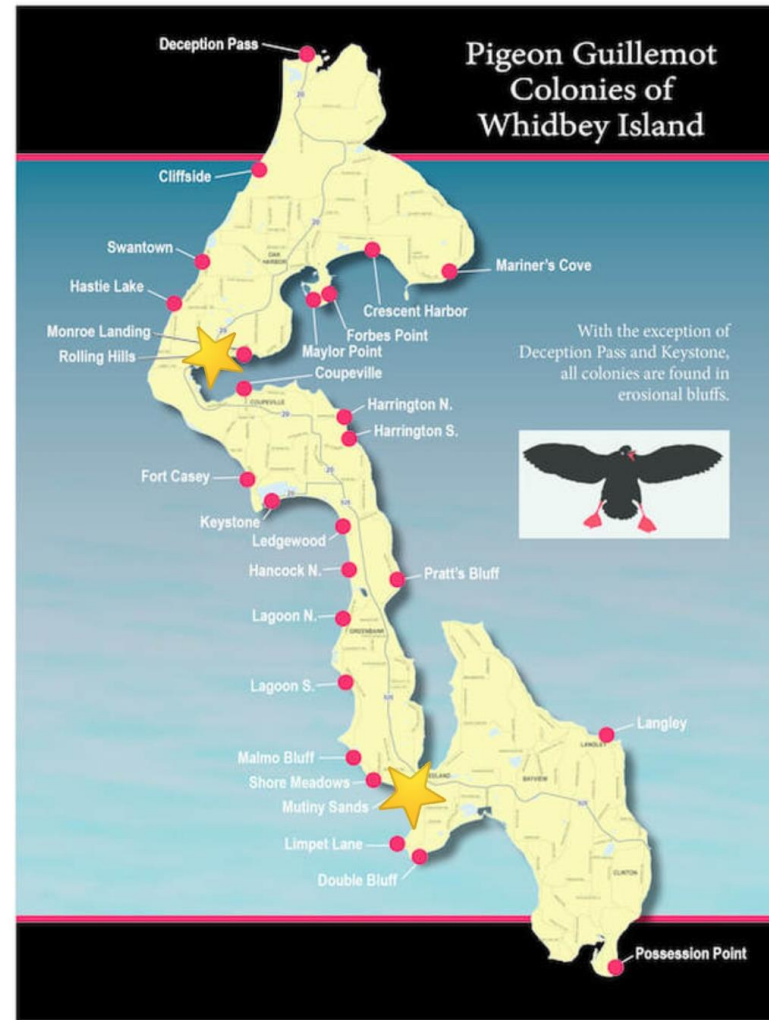
Project Focus

- Track type of prey delivered
- Track population
- Record all disturbances
- Continue to add data to baseline and monitor it



Colonies Studied

- 27 colonies across Whidbey Island
 - Monitored once a week for one hour by volunteers
- Intern focus colonies: Rolling Hills and Mutiny Sands



Methods

- Monday- Friday/ Tuesday- Saturday
- 6am-10am
- Track:
 - Population
 - Prey Deliveries
 - Gunnels
 - Sculpins
 - Other/ Unknown
 - Disturbances



Site Summary Rolling Hills

- Highest pop. count 45
- Average pop. count 23
- # of occupied burrows 6
- 83% probable fledging success



Site Summary Mutiny Sands

- Highest pop. count 63
- Average pop. count 22
- # of occupied burrows 8
- 87% probable fledging success



Estimated Fledging Success and Weekly Deliveries Rolling Hills

Date (weeks):	Burrow #					
	3*	5	8	26	32	33
6/11/18	0	2	8	2	-	0
6/18/18	7	6	22	2	6	9
6/25/18	4	3	7	0	6	0
7/3/18	17	10	16	0	10	11
7/10/18	9	4	0	0	7	2
7/17/18	13	0	0	0	0	0
7/24/18	0	0	0	0	0	0

Estimated Fledging Success and Weekly Deliveries Mutiny Sands

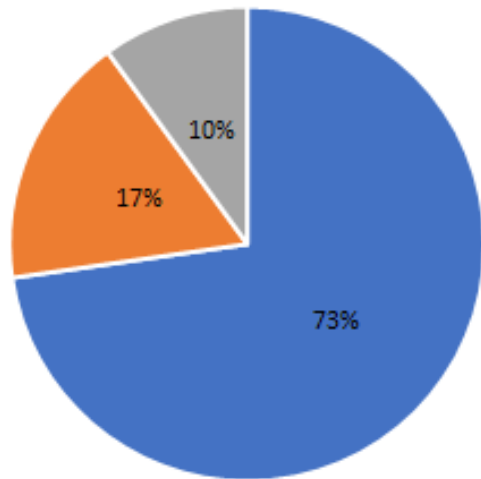
	Burrow #							
Date (weeks):	2	7	10	17	18	23	24	25
6/11/18	0	0	0	0	0	0	0	0
6/18/18	0	0	0	0	0	5	0	0
6/25/18	0	0	5	0	0	8	7	0
7/3/18	0	0	10	0	0	10	10	0
7/10/18	4	0	3	0	0	20	8	8
7/17/18	6	0	0	0	0	11	14	9
7/24/18	9	0	0	6	6	0	11	15
7/30/18	16	4	0	7	0	0	0	8
8/7/18	2	2	0	6	0	0	0	1
8/14/18	8	5	0	9	0	0	0	0
8/21/18	0	1	0	0	0	0	0	0
8/28/18	0	15	0	0	0	0	0	0
9/4/18	0	2	0	0	0	0	0	0

Estimated Fledging Success Through the Years

Estimated Fledging Success Rolling Hills			Estimated Fledging Success Mutiny Sands	
2018	83%		2018	87%
2017	82%		2017	Not monitored
2016	Not monitored		2016	64%
2015	Not monitored		2015	58%
2014	89%		2014	Not monitored
2013	46%		2013	60%
2012	75%		2012	66%
2011	73%		2011	78%
2010	58%		2010	92%
2009	No Data		2009	71%

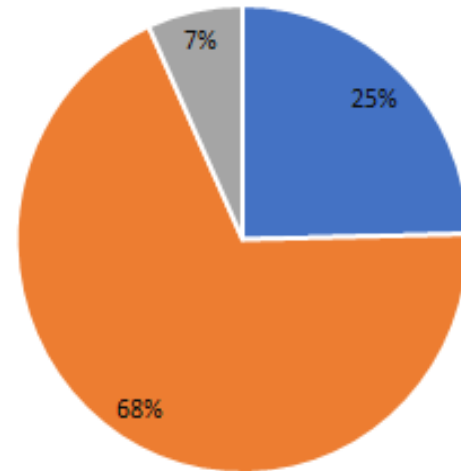
Prey Choice

Prey Choice at Rolling Hills 2018



■ Gunnels ■ Sculpins ■ Other

Prey Choices at Mutiny Sands 2018

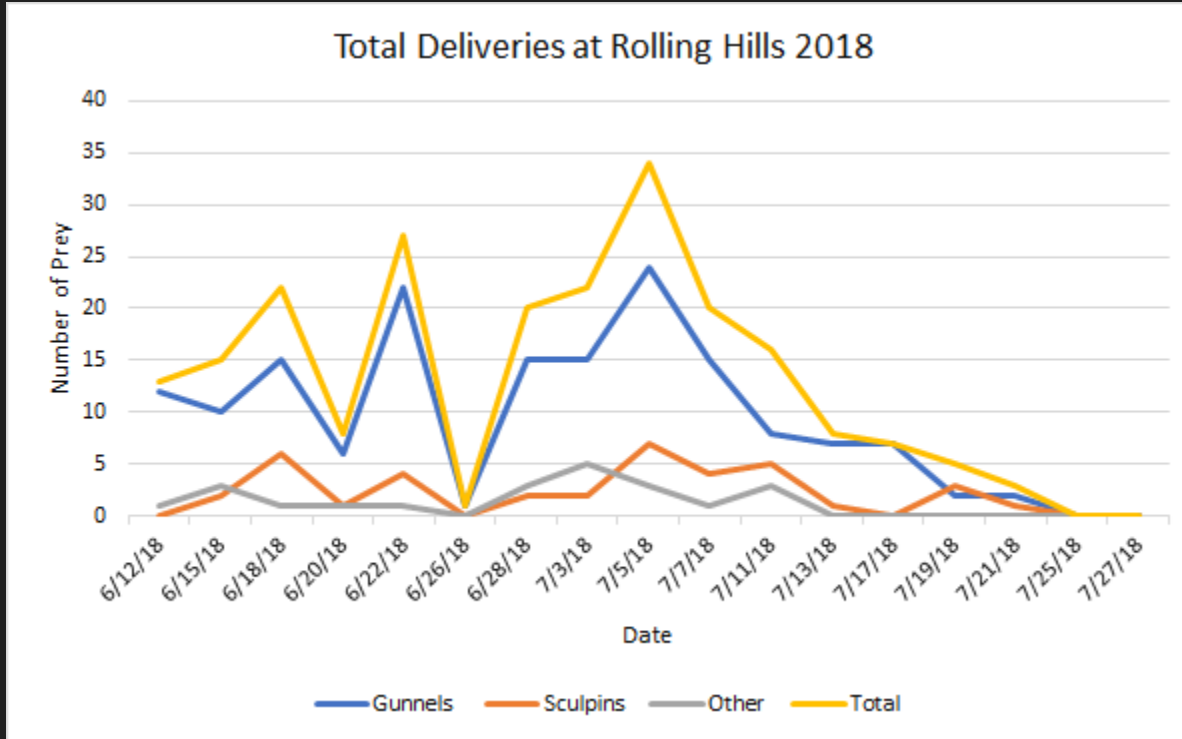


■ Gunnels ■ Sculpins ■ Other

Prey Delivered to Chicks

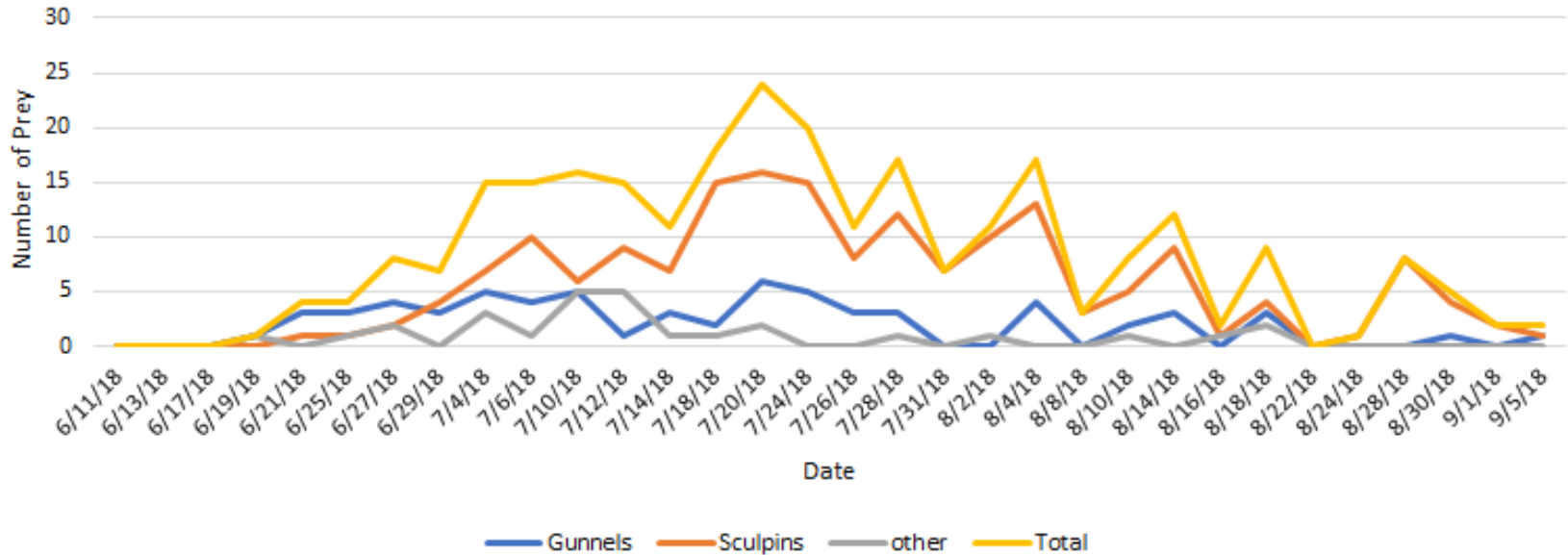


Daily Rate of Deliveries Rolling Hills

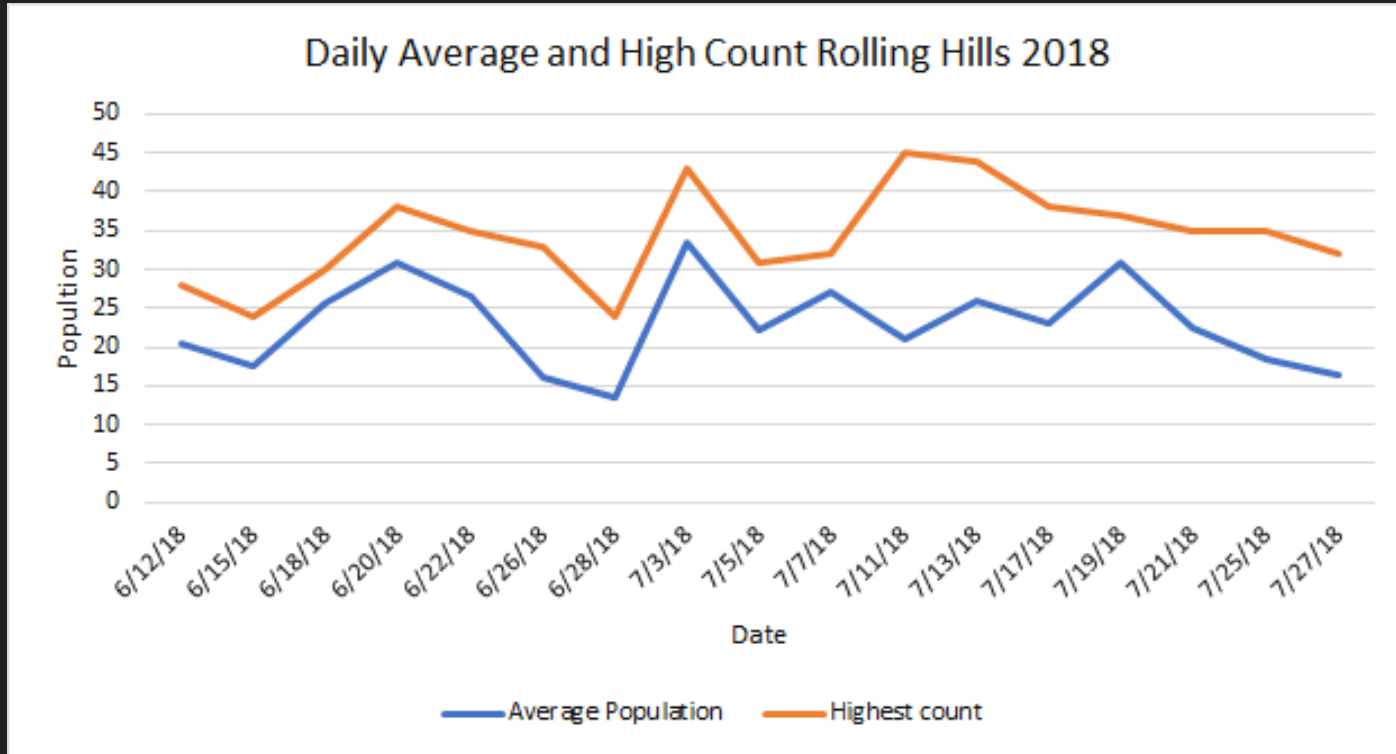


Daily Rate of Deliveries Mutiny Sands

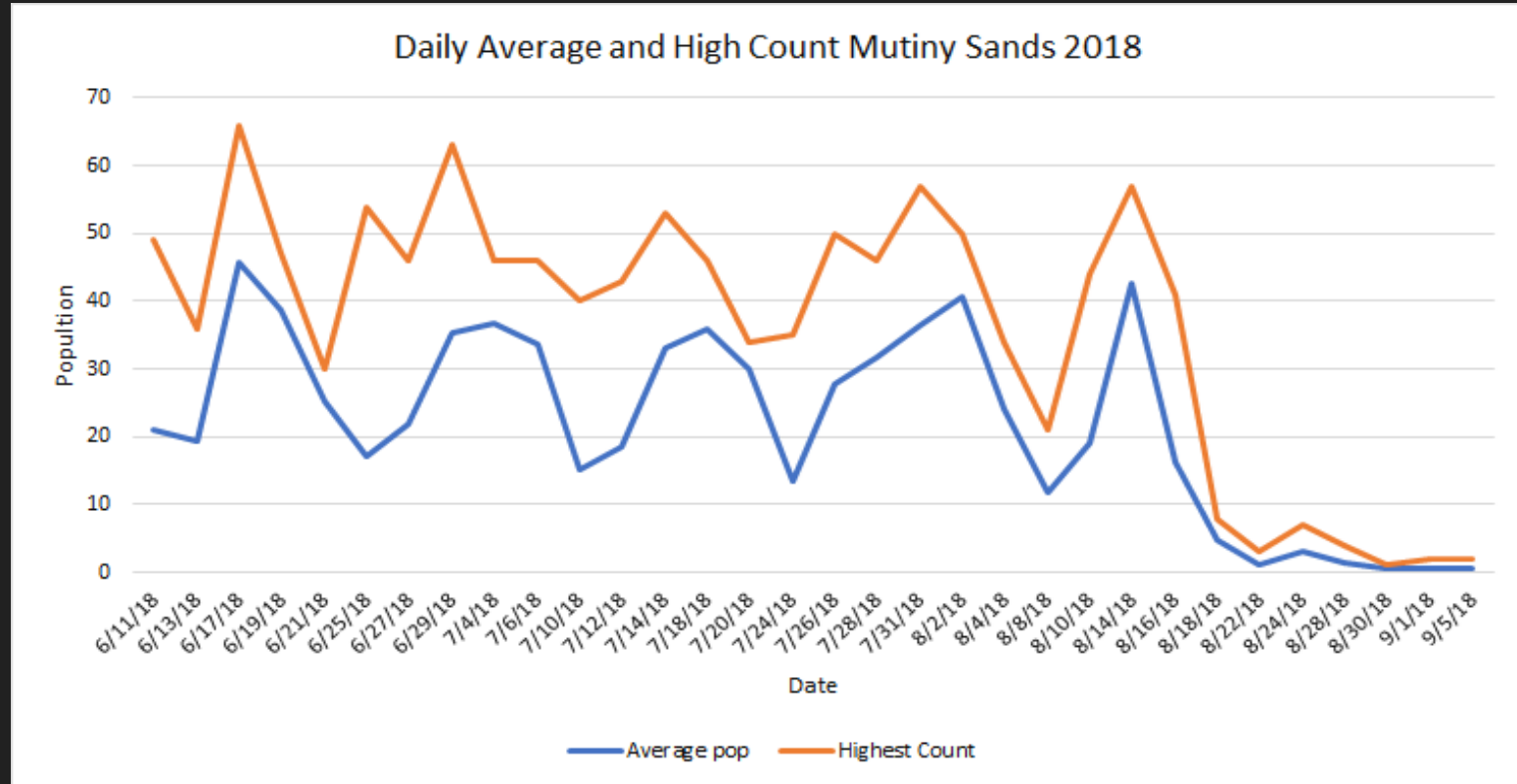
Total Deliveries at Mutiny Sands 2018



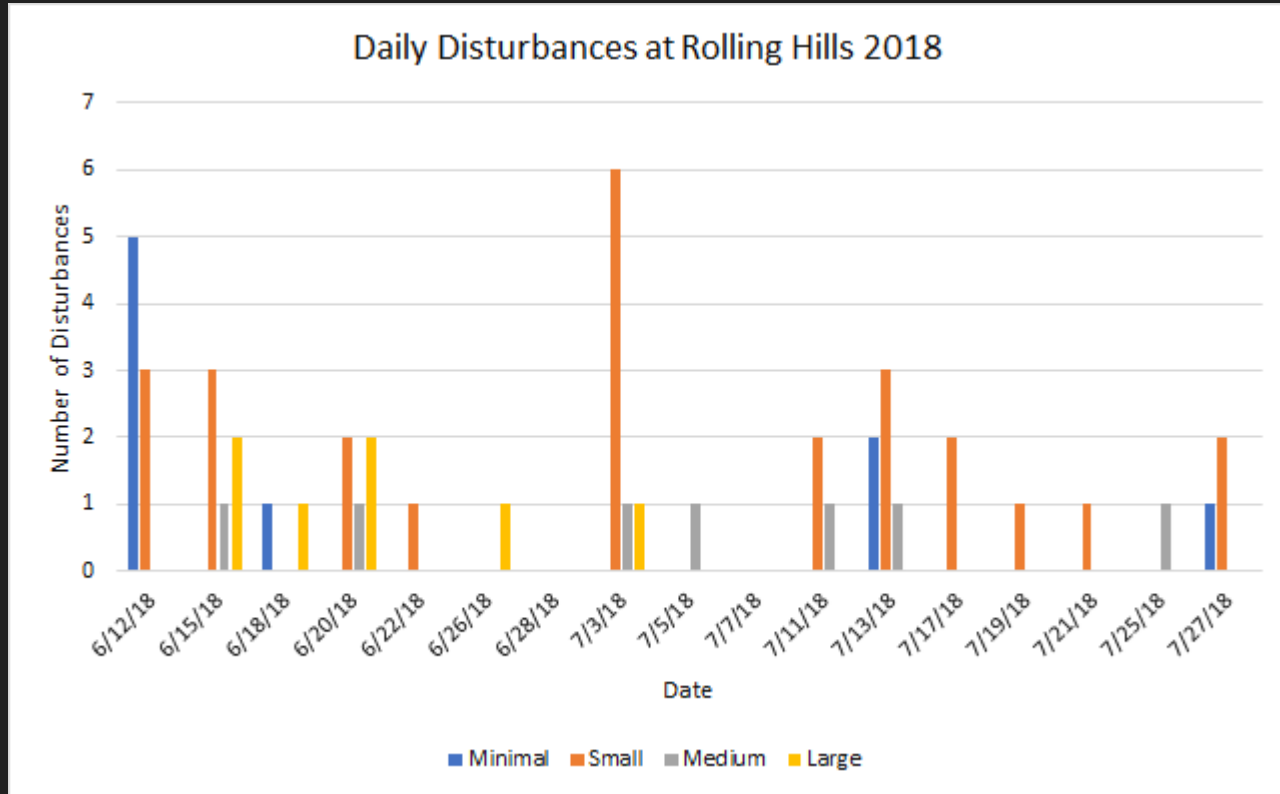
Daily Population Rolling Hills



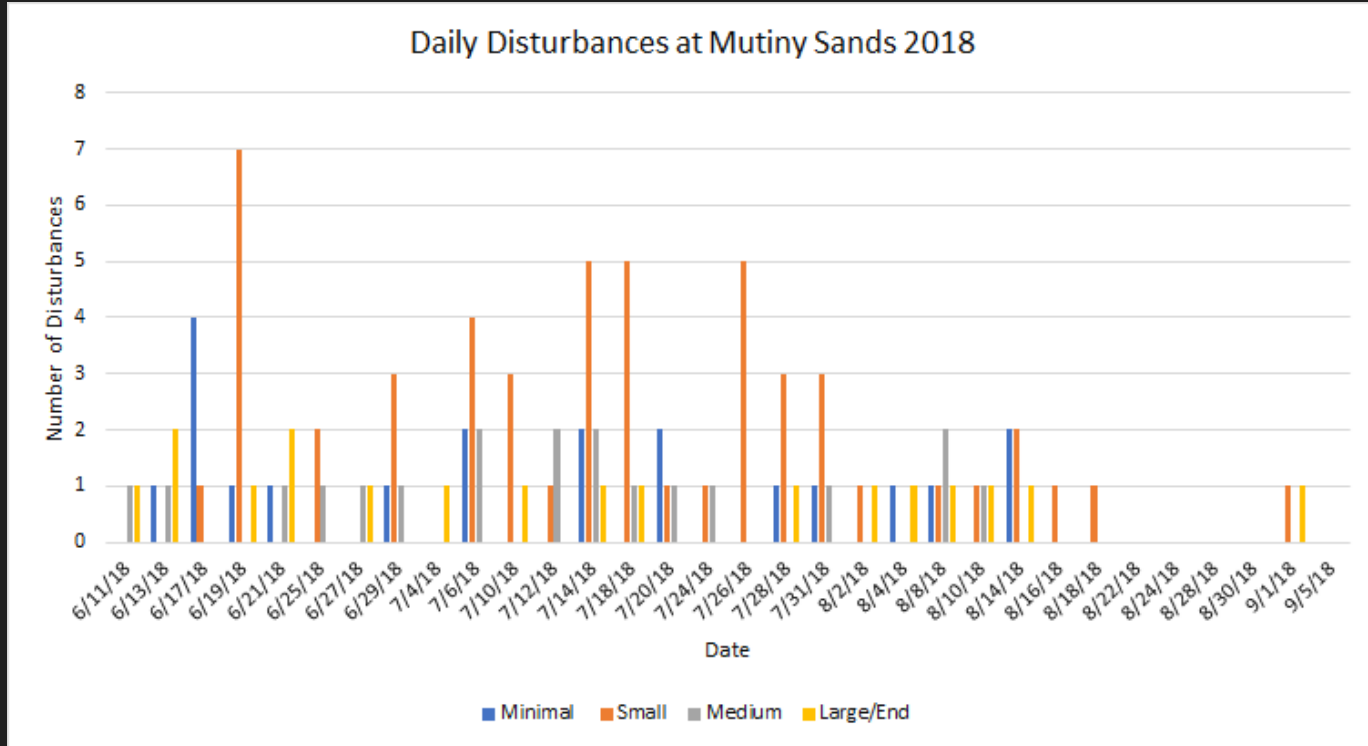
Daily Population Mutiny Sands



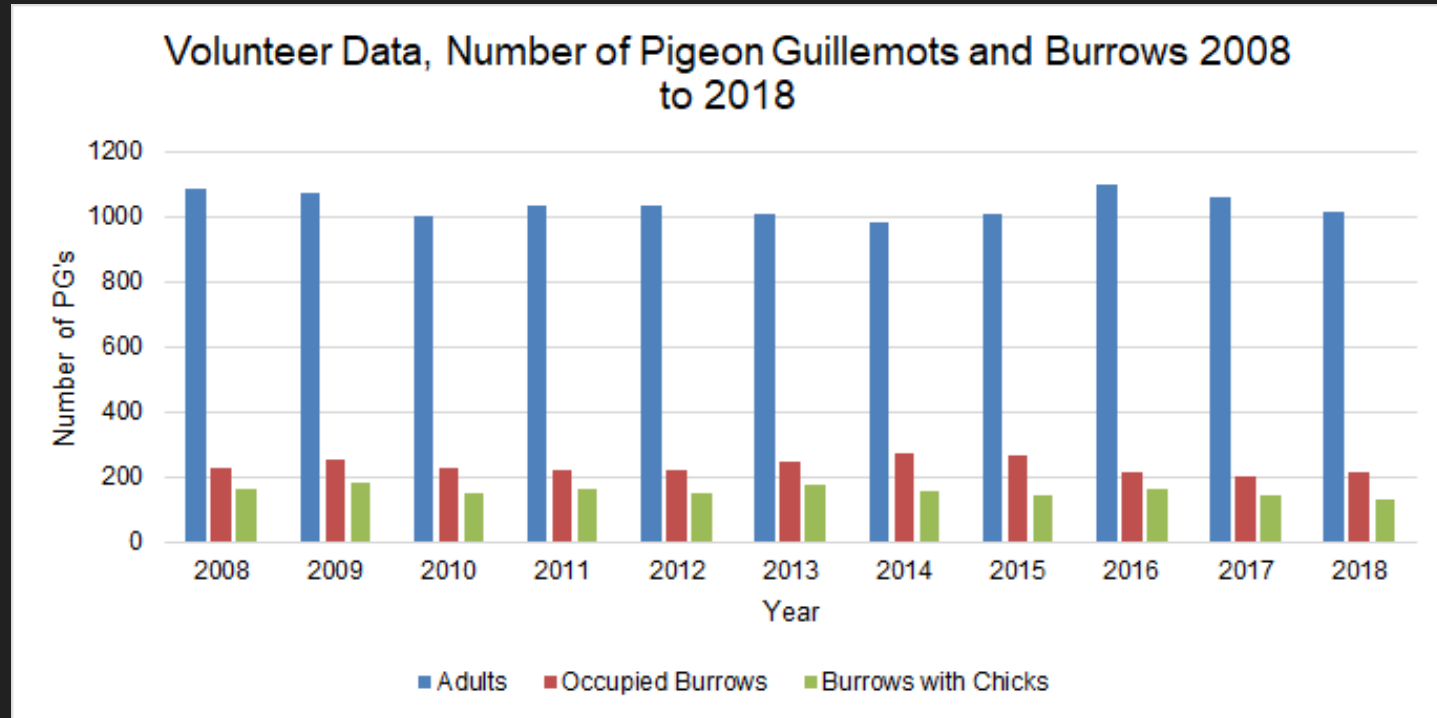
Disturbances Rolling Hills



Disturbances Mutiny Sands



Population: Whidbey Island



Conclusion

- Limitations:
 - Not being able to see the whole bluff
- Further studies:
 - Continue collecting disturbance data
 - Look into why adults specialize in prey type





Questions?



Thank You!



Mutiny Sands
Community
Association