



NOAA
FISHERIES

2019 Annual Deployment Plan, Appendix C: Comparison of alternative sampling designs

Presented by

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Deployment designs

Stratification (1 design):

- HAL, POT, TRW, POT Tender, and TRW Tender

Allocation (2* designs):

- Minimum equal allocation
- 15% + optimization

**Gear-specific hurdles other than 15% are investigated in Appendix E*

Deployment designs (3 total)

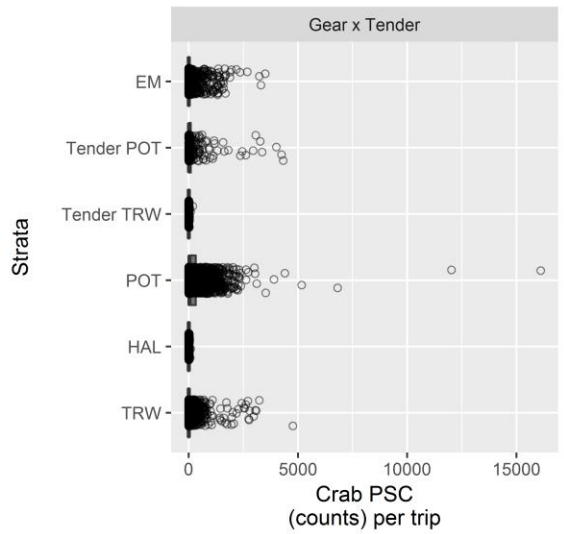
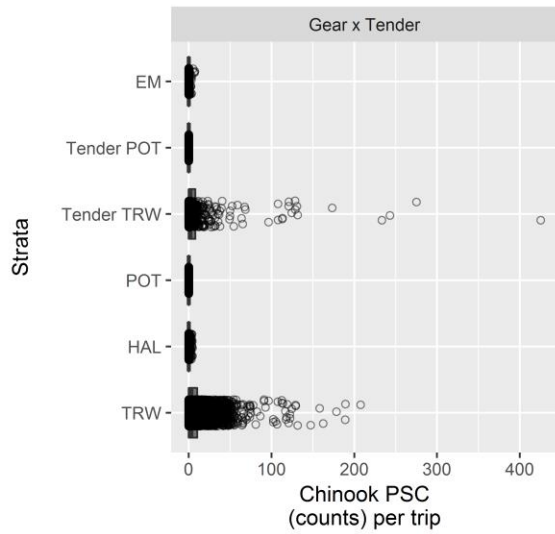
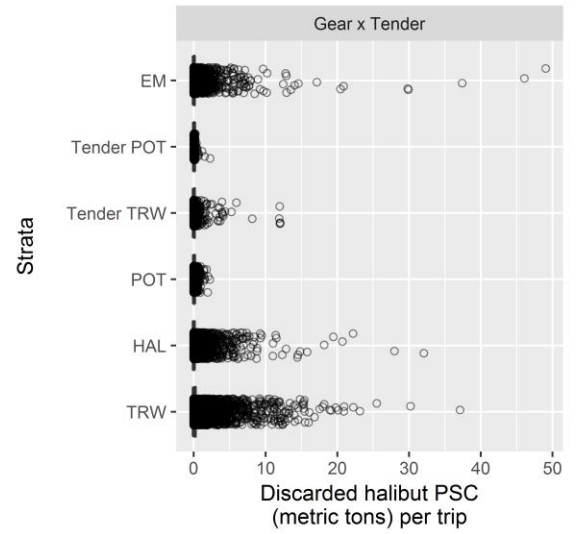
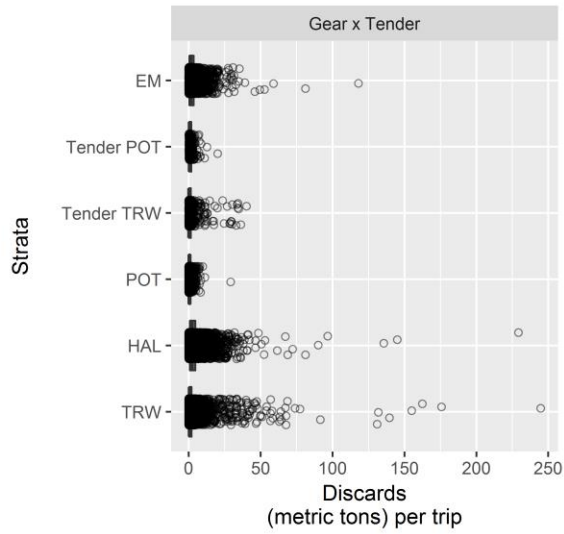
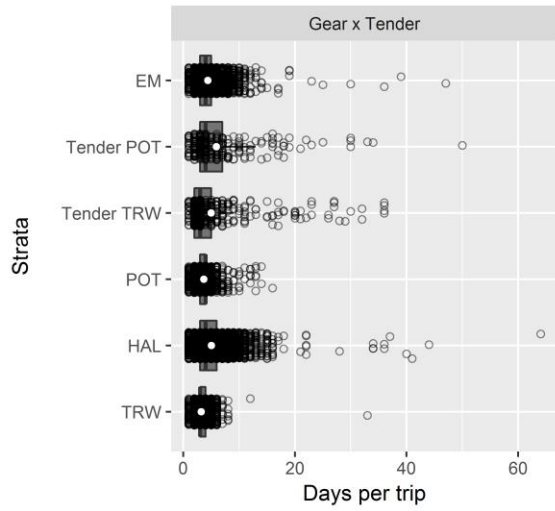
- Minimum equal allocation
- 15% + optimization on discards, halibut, and Chinook
- 15% + optimization on discards, halibut, Chinook, and crab

Rates and weightings: equal allocation

Stratum (h)	Metric	N_{h2019}	n_h	d_h	r_h (%)
TRW	None	2,085	313	1,014	15.00
HAL	None	2,013	302	1,530	15.00
POT	None	811	122	450	15.00
Tender TRW	None	69	10	52	15.00
Tender POT	None	71	11	63	15.00
TOTAL		5049	758	3109	

Rates and weightings: 15% + optimized

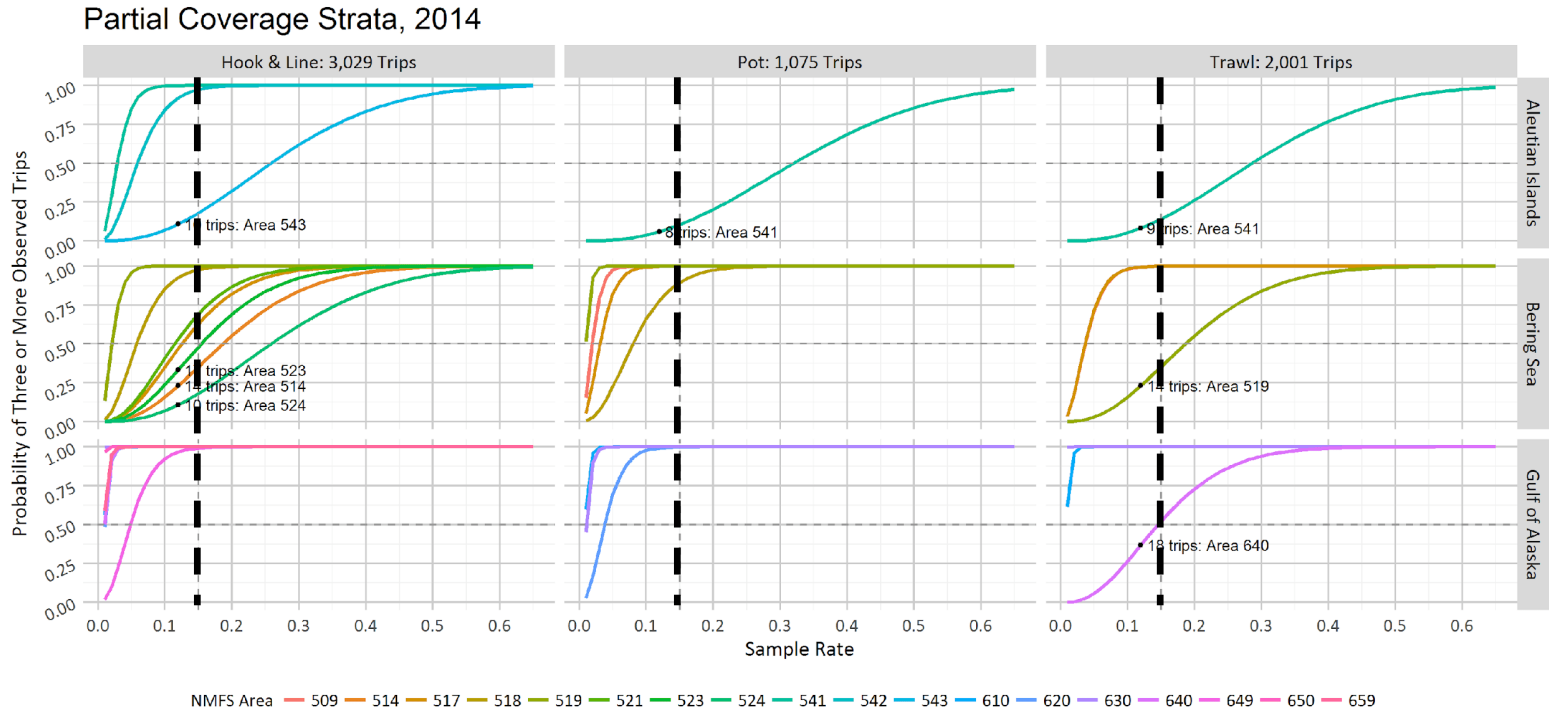
Stratum (h)	N_{h2019}	n_h	d_h	W_{hopt}		r_h (%)
				No crab	With crab	
TRW	2,085	313	1,014	0.72 ↑	0.64 ↓	15.00
HAL	2,013	302	1,530	0.23	0.18	15.00
POT	811	122	450	0.02 ↓	0.15 ↑	15.00
Tender TRW	69	10	52	0.03	0.02	15.00
Tender POT	71	11	63	0.00	0.01	15.00
TOTAL	5049	758	3109	1.00	1.00	



Gap analysis

Allocation design	G3	G3 Relative	G1	G1 Relative
Equal Allocation	0.59	1.00	0.84	1.00
15% + Optimized on Discards + Halibut + Chinook PSC	0.59	1.00	0.84	1.00
15% + Optimized on Discards + Halibut + Chinook + Crab PSC	0.59	1.00	0.84	1.00

Appendix E: Choosing a hurdle



Note that only one HAL trip occurred in NMFS Area 513; this data point (NMFS Area) is omitted
Areas with 20 or fewer trips are labelled

The 15% minimum deployment rate does not guarantee that all post-strata will have at least 3 observed trips. Instead, it represents the point at which many (*but not all*) post-strata have a greater than 50% chance of containing data (at least 3 observed trips) in a year.