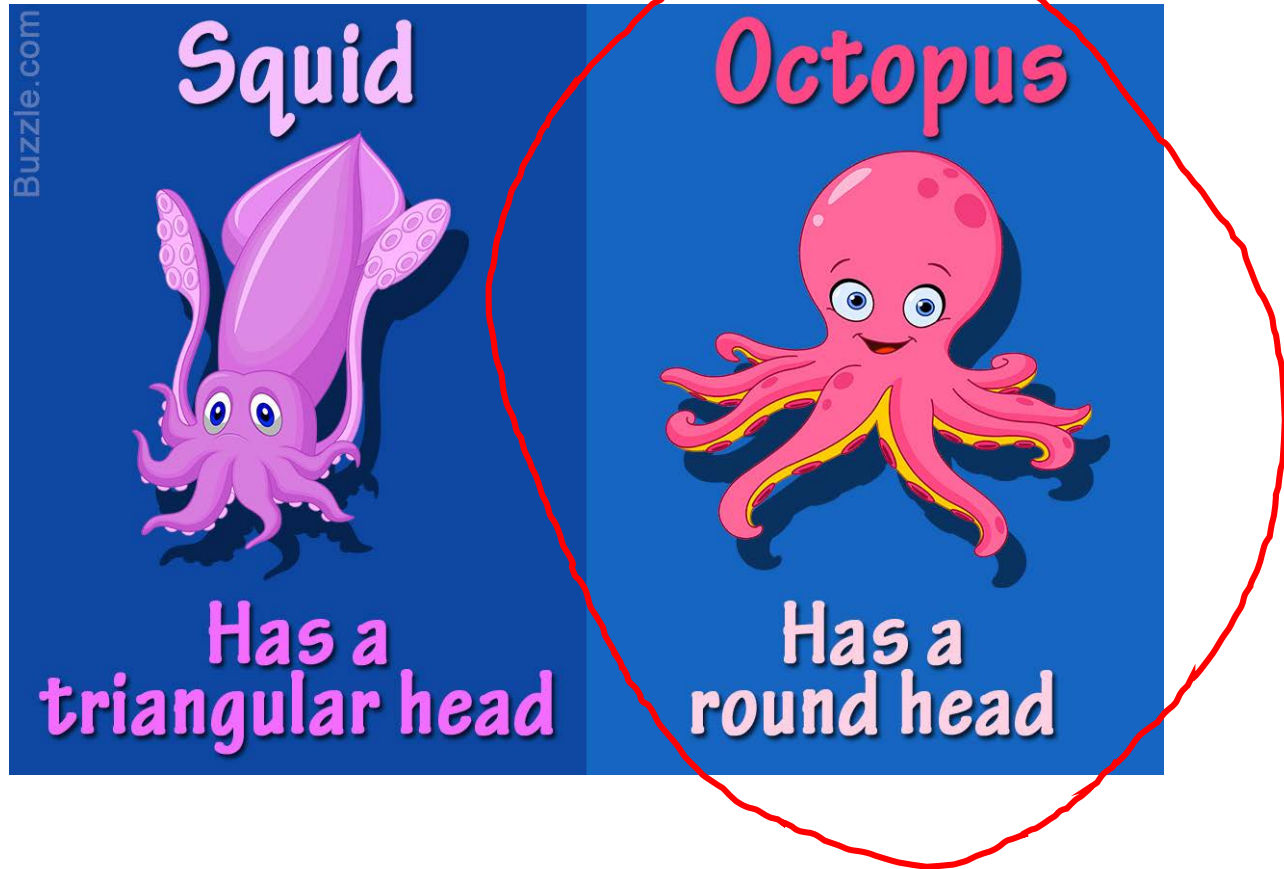


GOA octopus complex

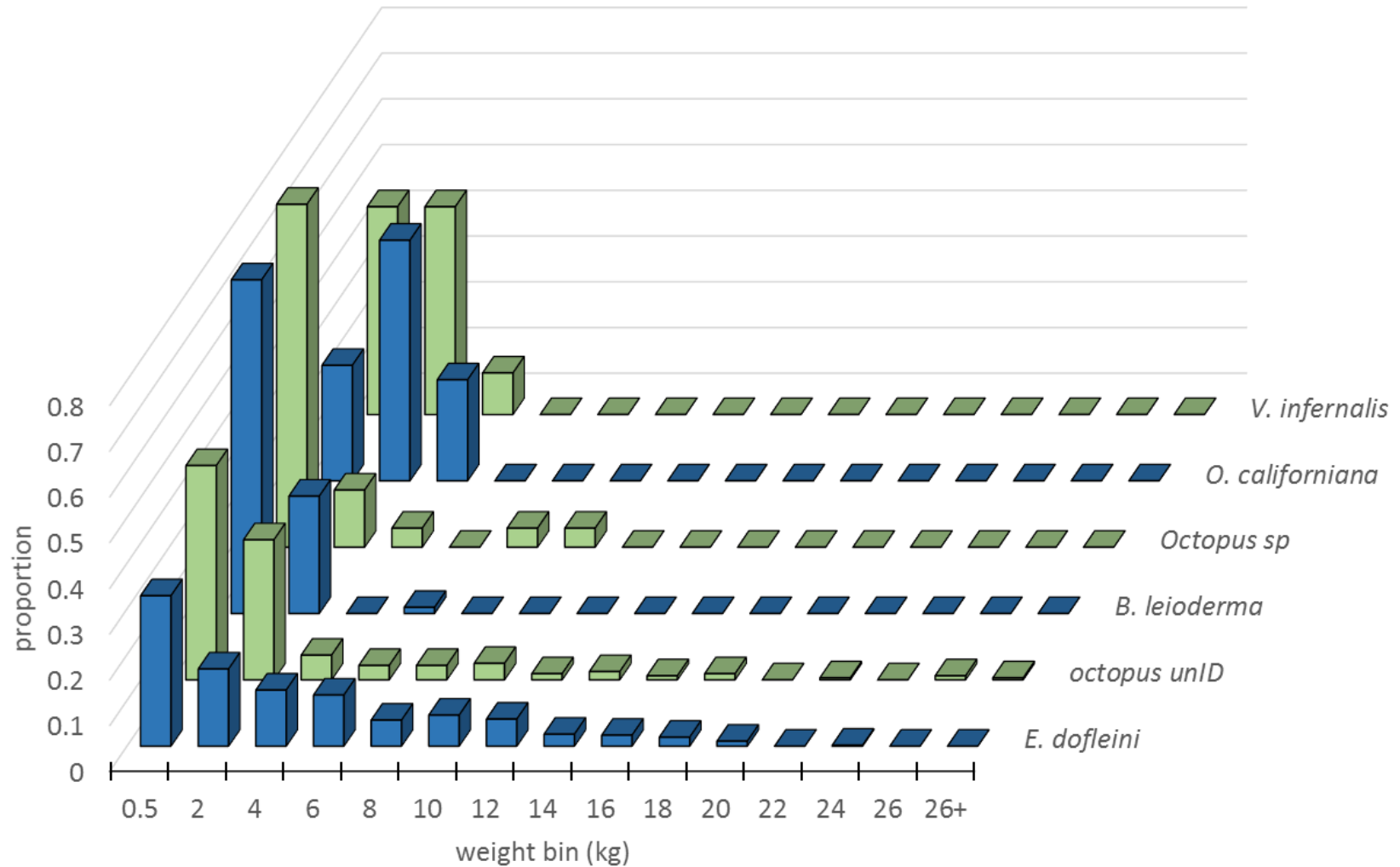


Olav A. Ormseth
Alaska Fisheries Science Center
NPFMC Groundfish Plan Team meeting, November 2017

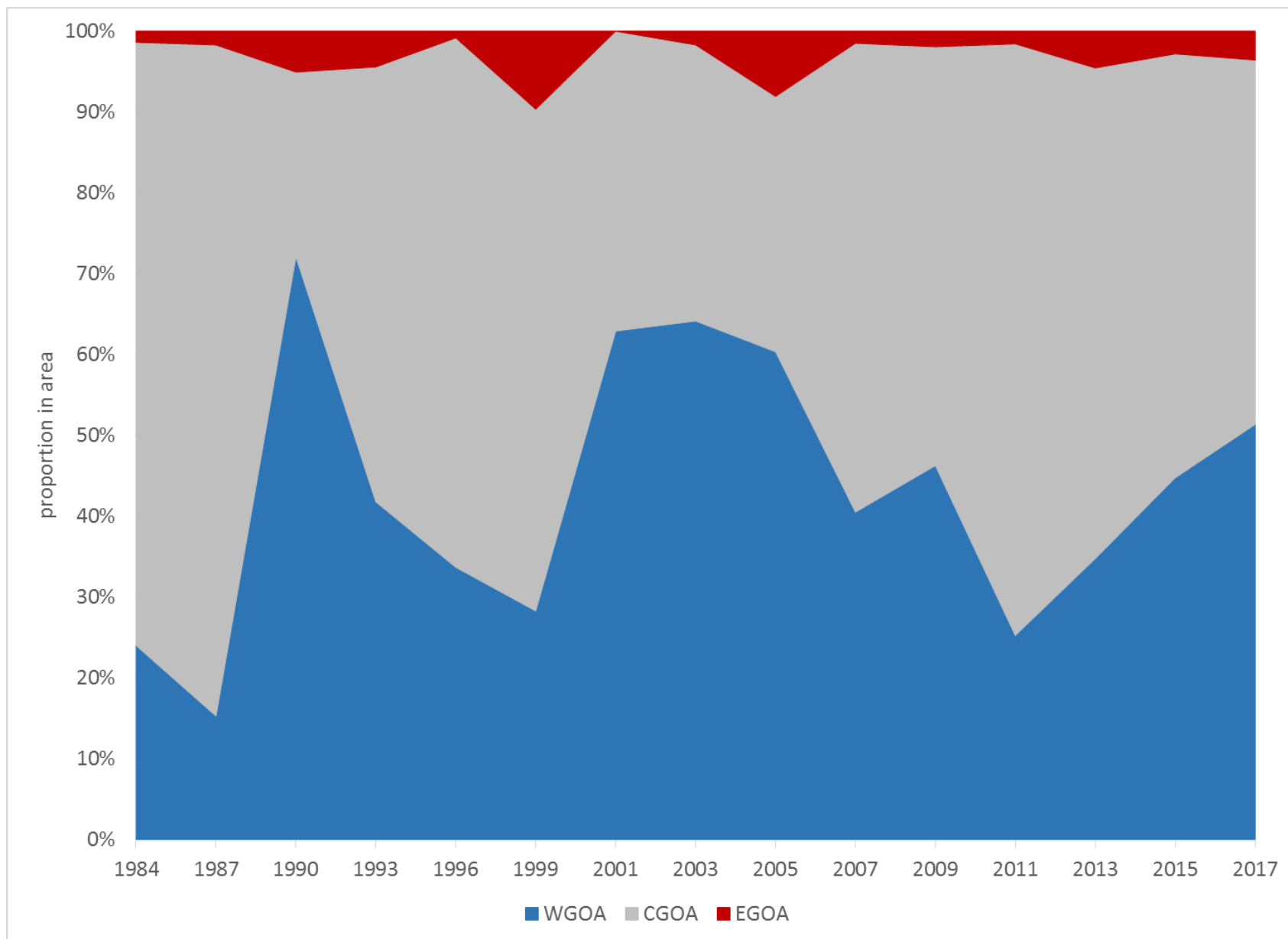
overview

- **species and distributions**
- **survey results (biomass & size)**
- **catch data**
- **harvest recommendations**

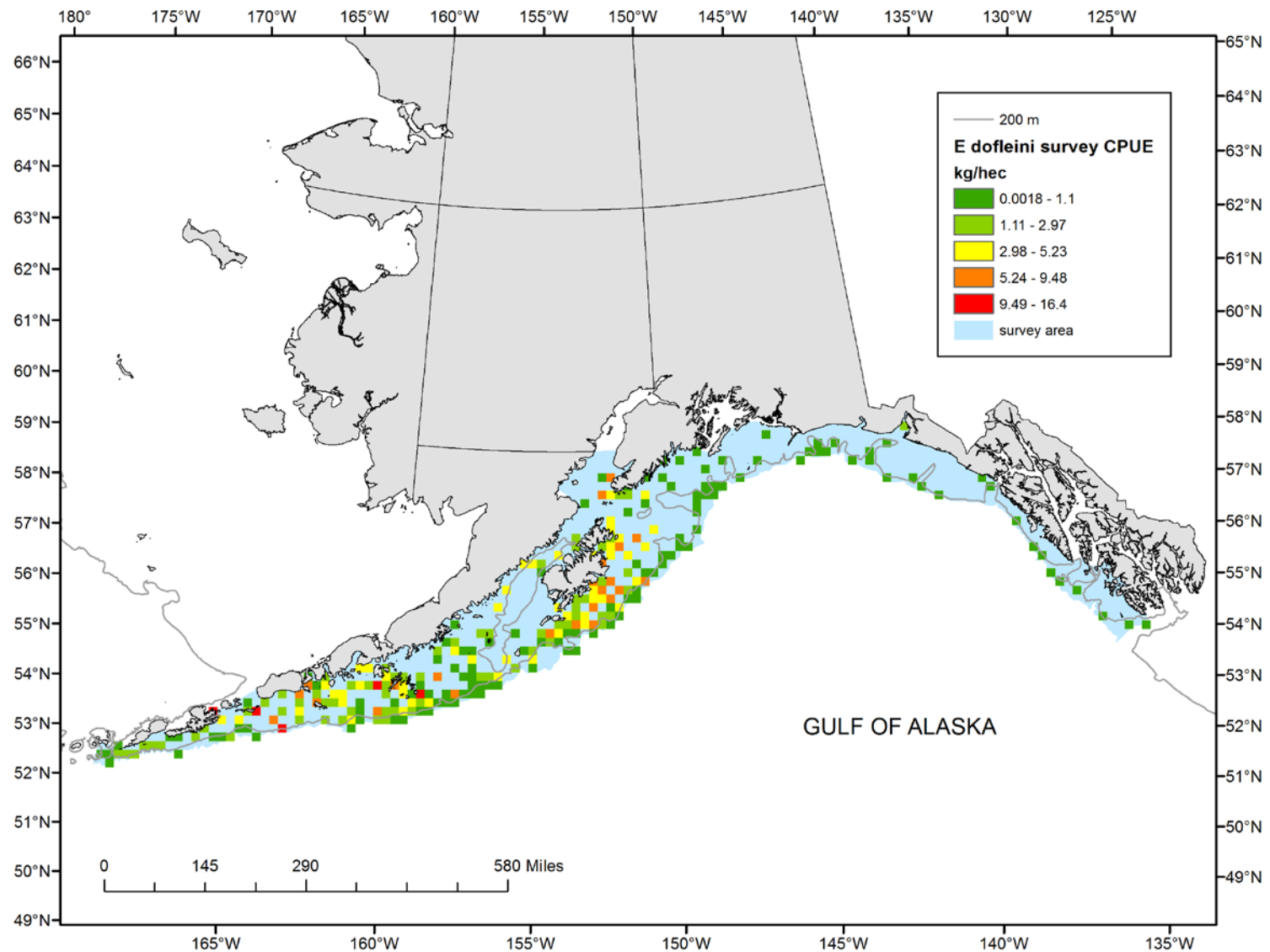
GOA octopus: survey size comps



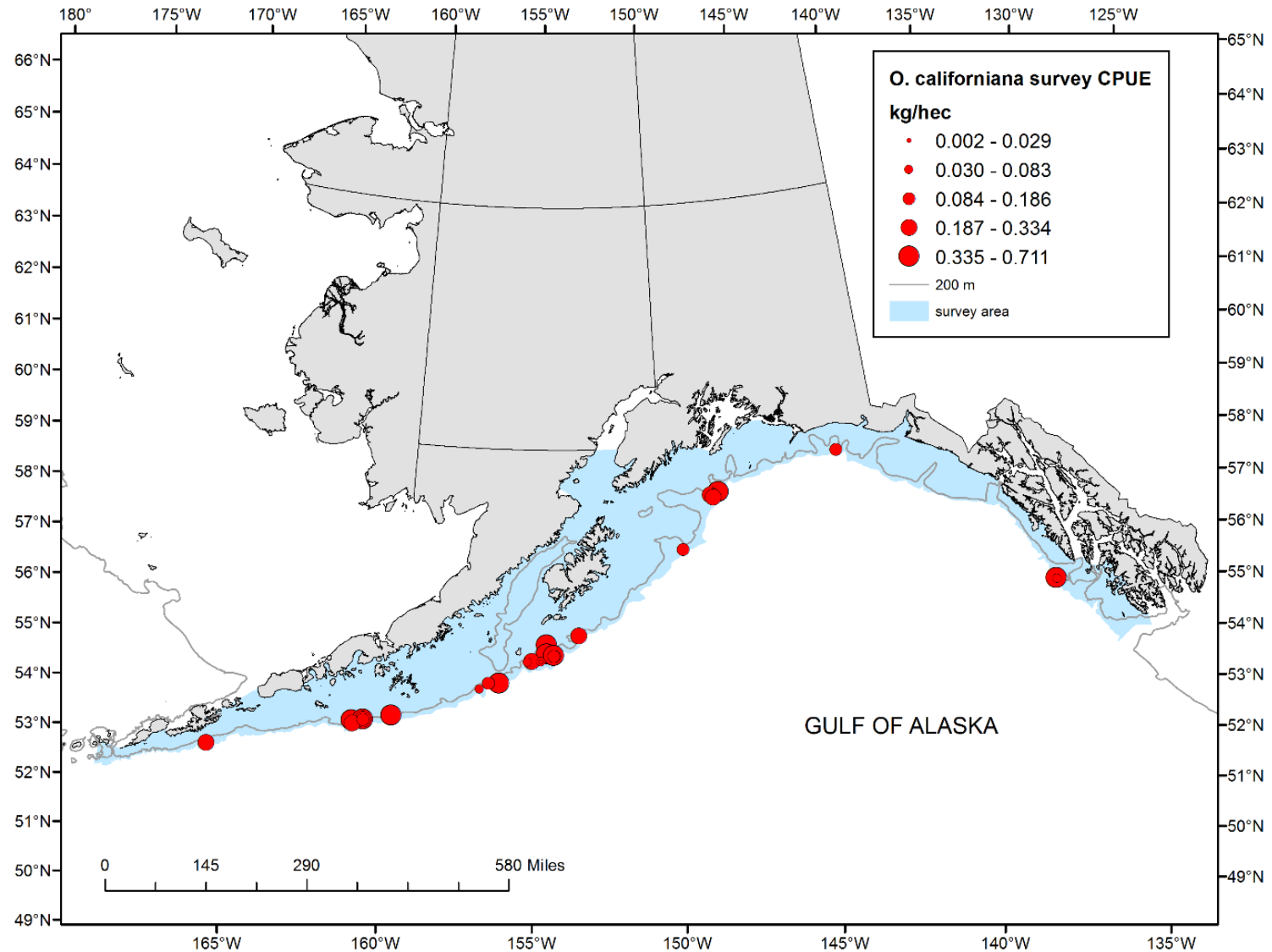
octopus biomass by area



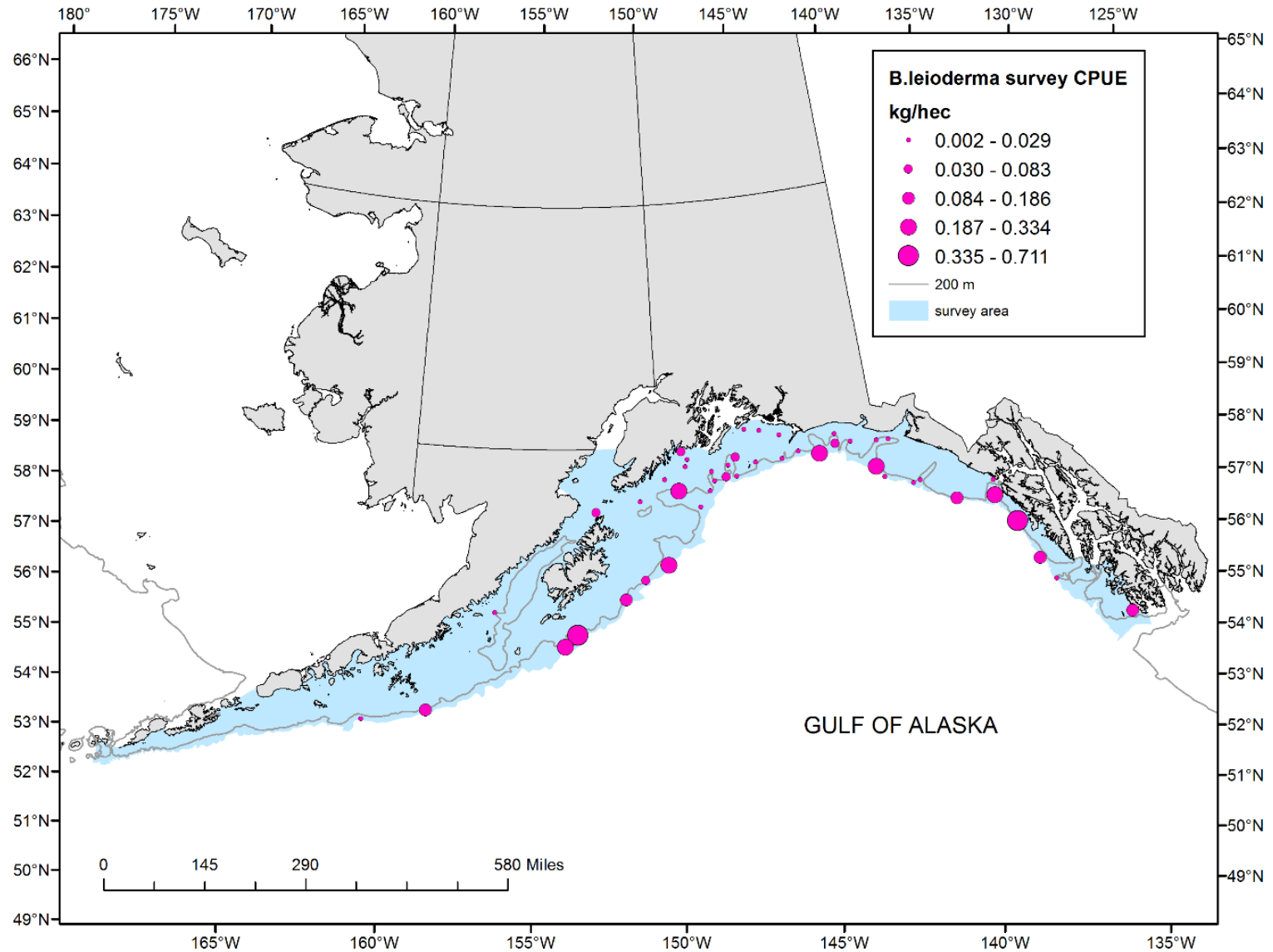
giant Pacific octopus *Enteroctopus dofleini*



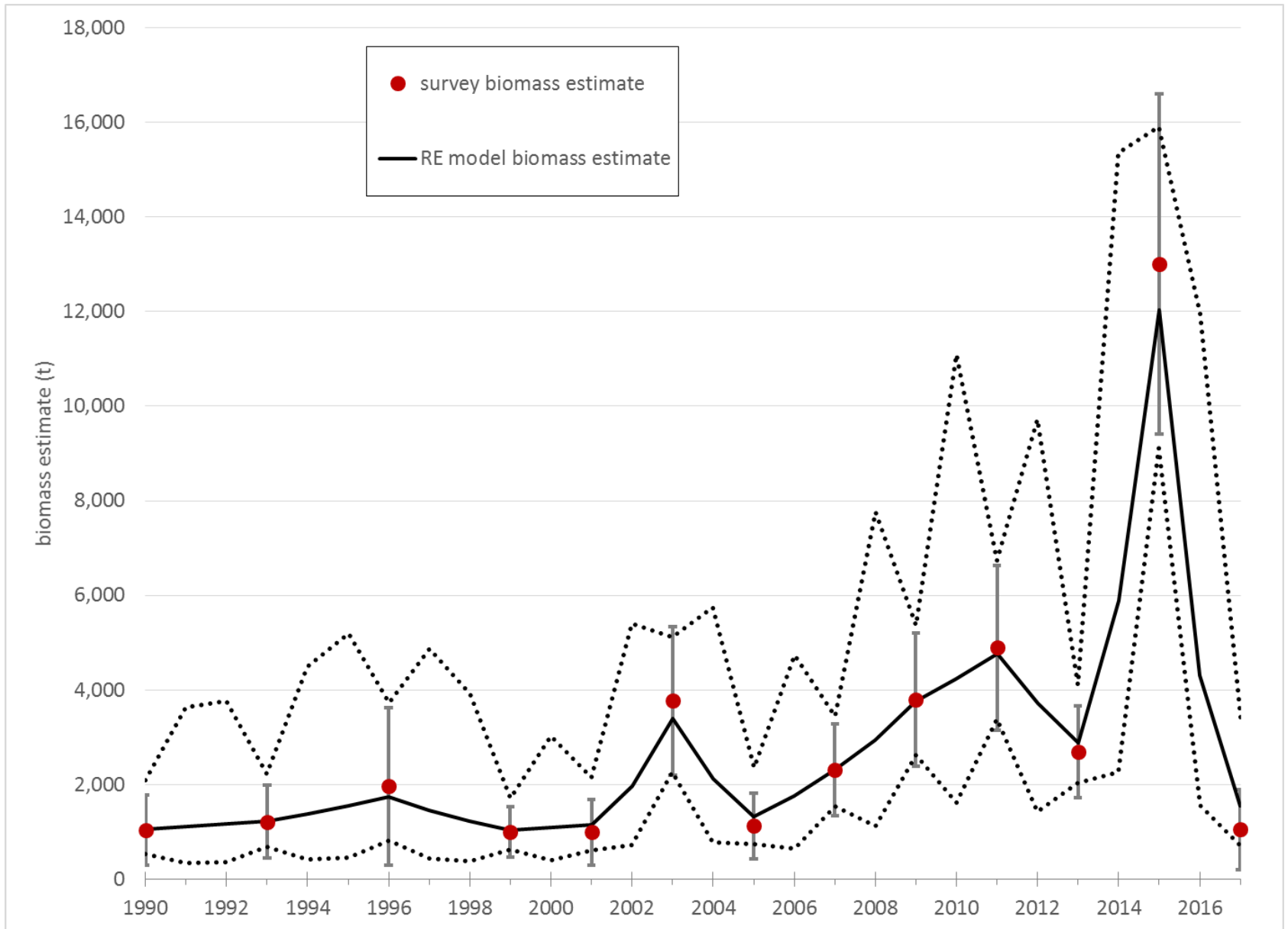
flapjack devilfish *Opisthoteuthis californiana*



smoothskin octopus *Benthoctopus leioderma*



octopus biomass (all species)



E. dofleini size comps

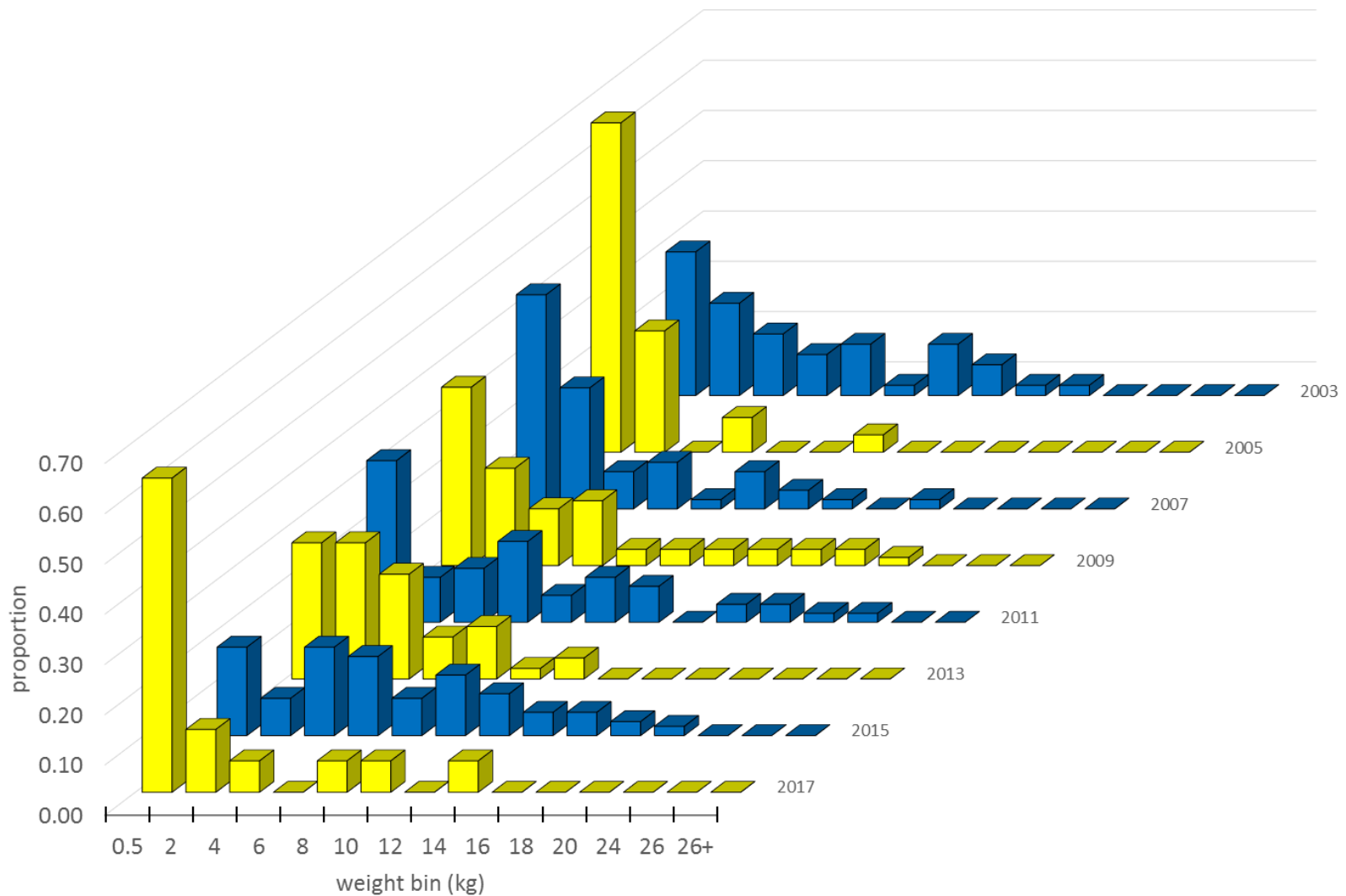
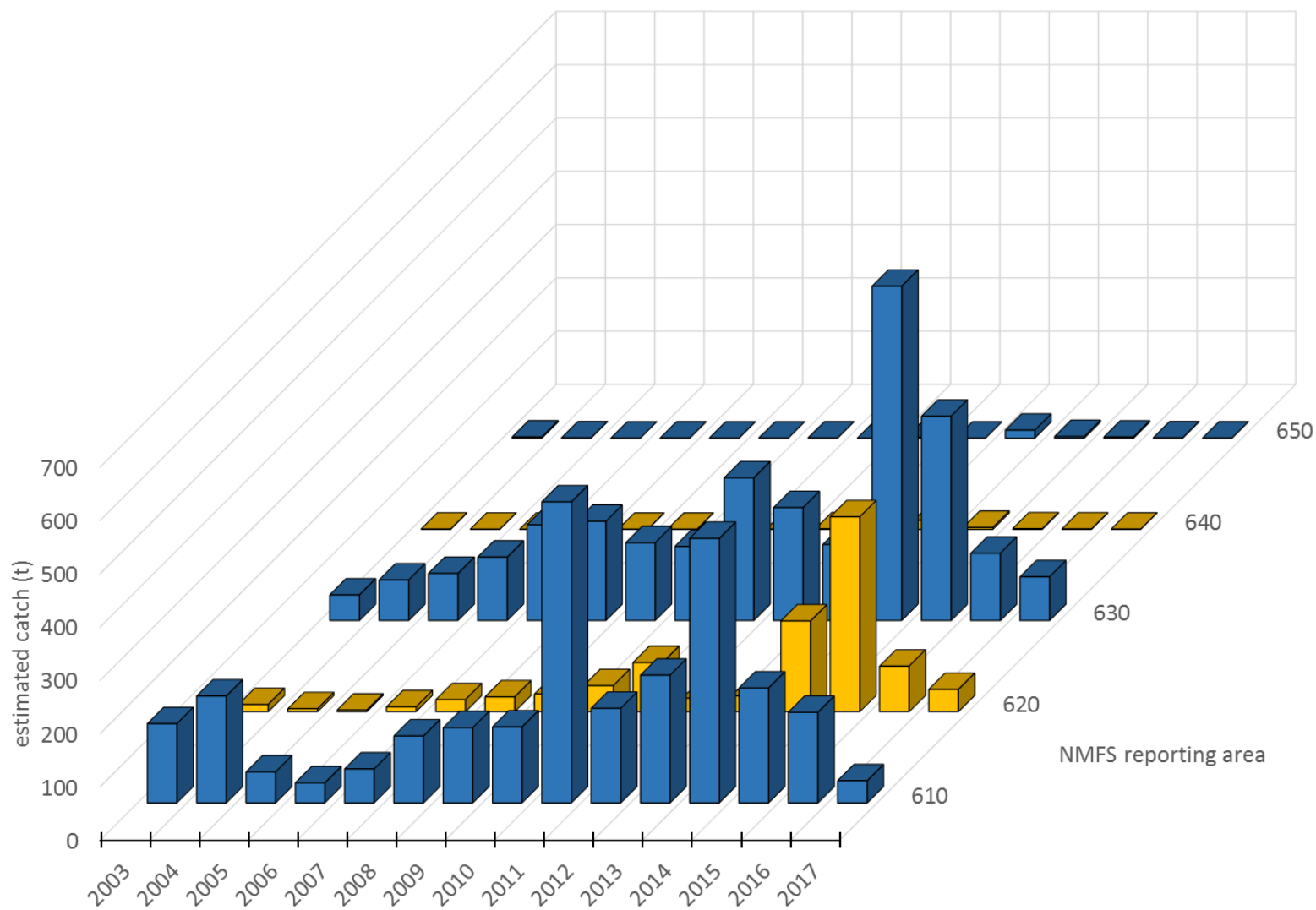


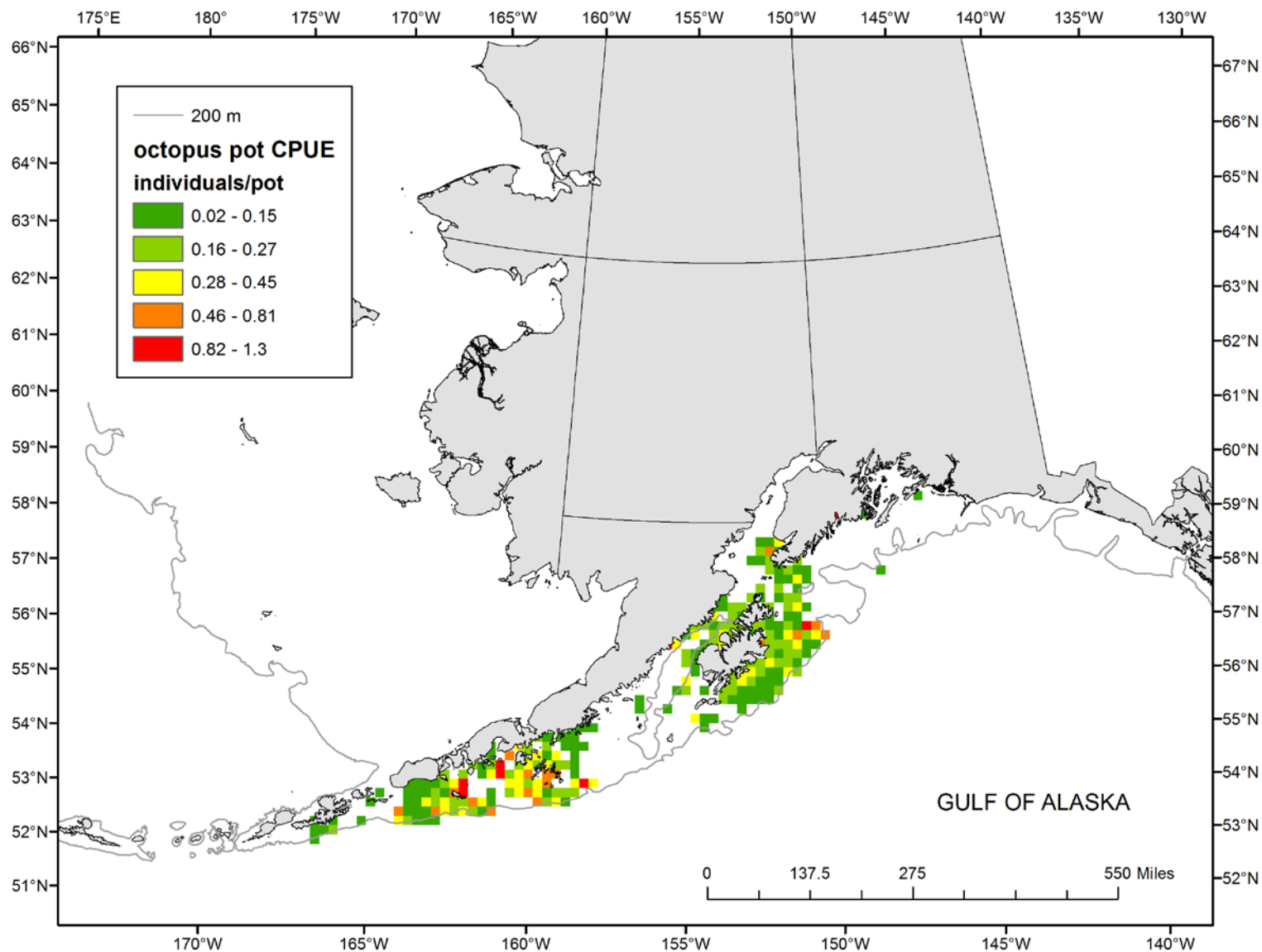
table: octopus survey biomass

	total survey hauls	<i>Enteroctopus dofleini</i>				miscellaneous octopuses				all octopuses			
		hauls w/ <i>E. dofleini</i>		biomas s (t)	CV	hauls w/ misc. octopus		biomass (t)	CV	hauls w/ any octopus		biomass (t)	CV
		#	%			#	%			#	%		
1984	929	-	-	-	-	89	10%	1,498	0.23	89	10%	1,498	0.23
1987	783	2	0%	172	0.82	33	4%	2,049	0.47	35	4%	2,221	0.43
1990	708	3	0%	163	0.94	31	4%	866	0.42	34	5%	1,029	0.38
1993	774	6	1%	437	0.57	36	5%	771	0.41	42	5%	1,208	0.33
1996	807	6	1%	222	0.60	28	3%	1,738	0.51	34	4%	1,960	0.46
1999	764	3	0%	293	0.70	45	6%	701	0.27	48	6%	994	0.28
2001	489	14	3%	571	0.43	15	3%	423	0.65	29	6%	993	0.37
2003	809	50	6%	3,590	0.22	22	3%	177	0.41	72	9%	3,767	0.22
2005	837	29	3%	382	0.31	29	3%	743	0.46	58	7%	1,125	0.32
2007	816	55	7%	2,155	0.23	18	2%	159	0.38	73	9%	2,314	0.22
2009	823	60	7%	3,496	0.20	21	3%	296	0.38	81	10%	3,791	0.19
2011	670	58	9%	4,743	0.19	11	2%	154	0.35	69	10%	4,896	0.18
2013	548	48	9%	2,420	0.20	19	3%	266	0.46	67	12%	2,686	0.18
2015	771	108	14%	12,642	0.15	11	1%	366	0.43	119	15%	13,008	0.14
2017	536	16	3%	1,009	0.44	9	2%	40	0.54	25	5%	1,049	0.43

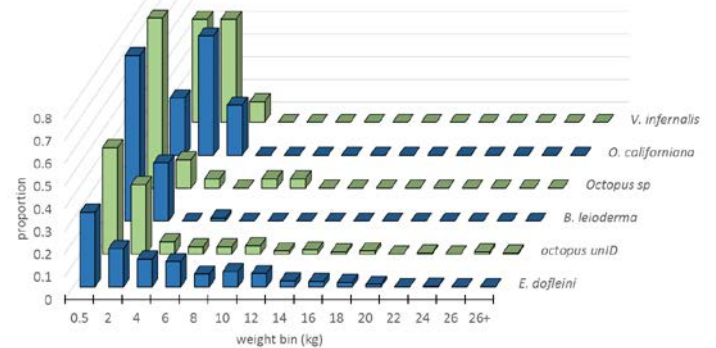
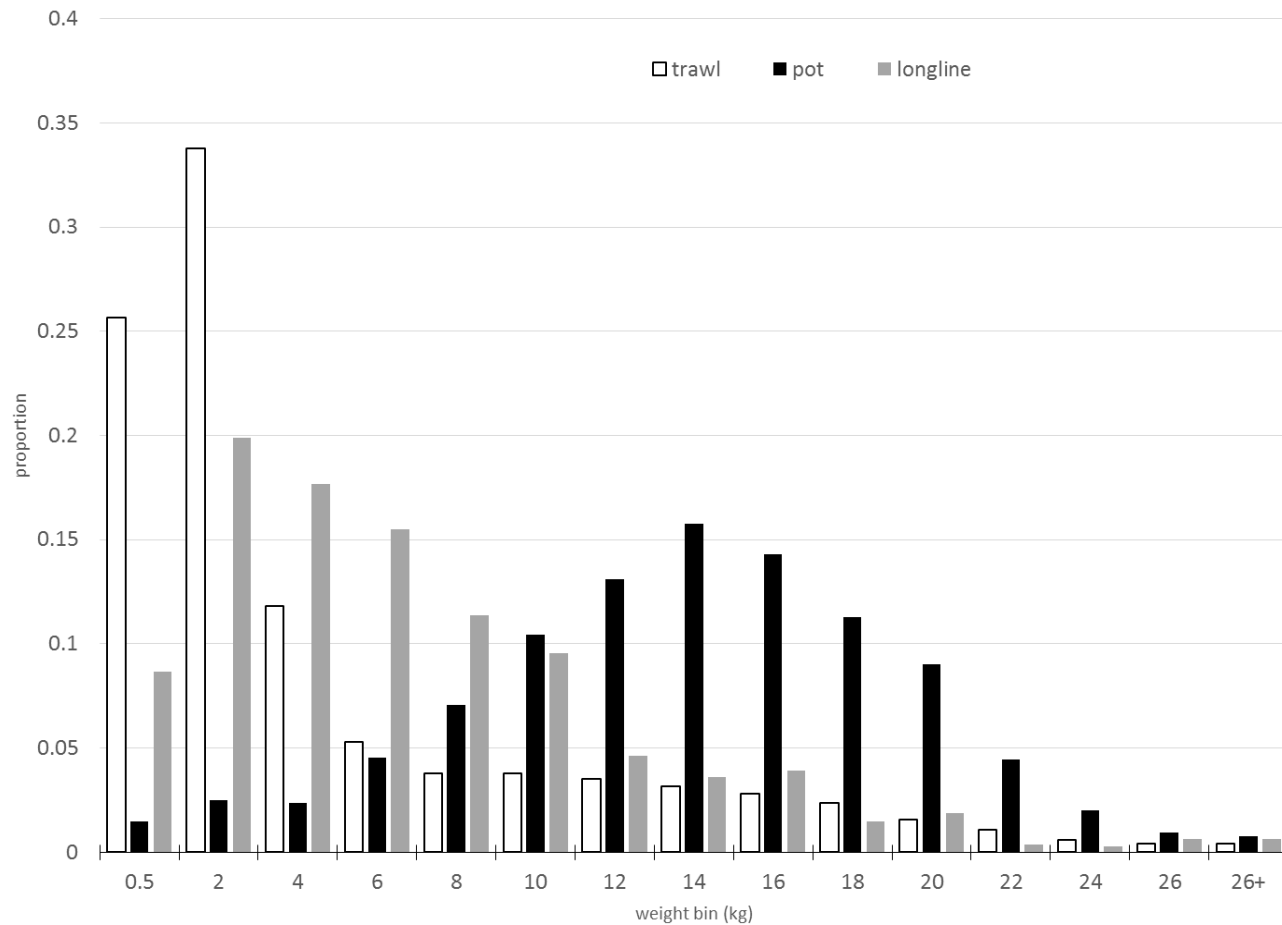
octopus catch by area



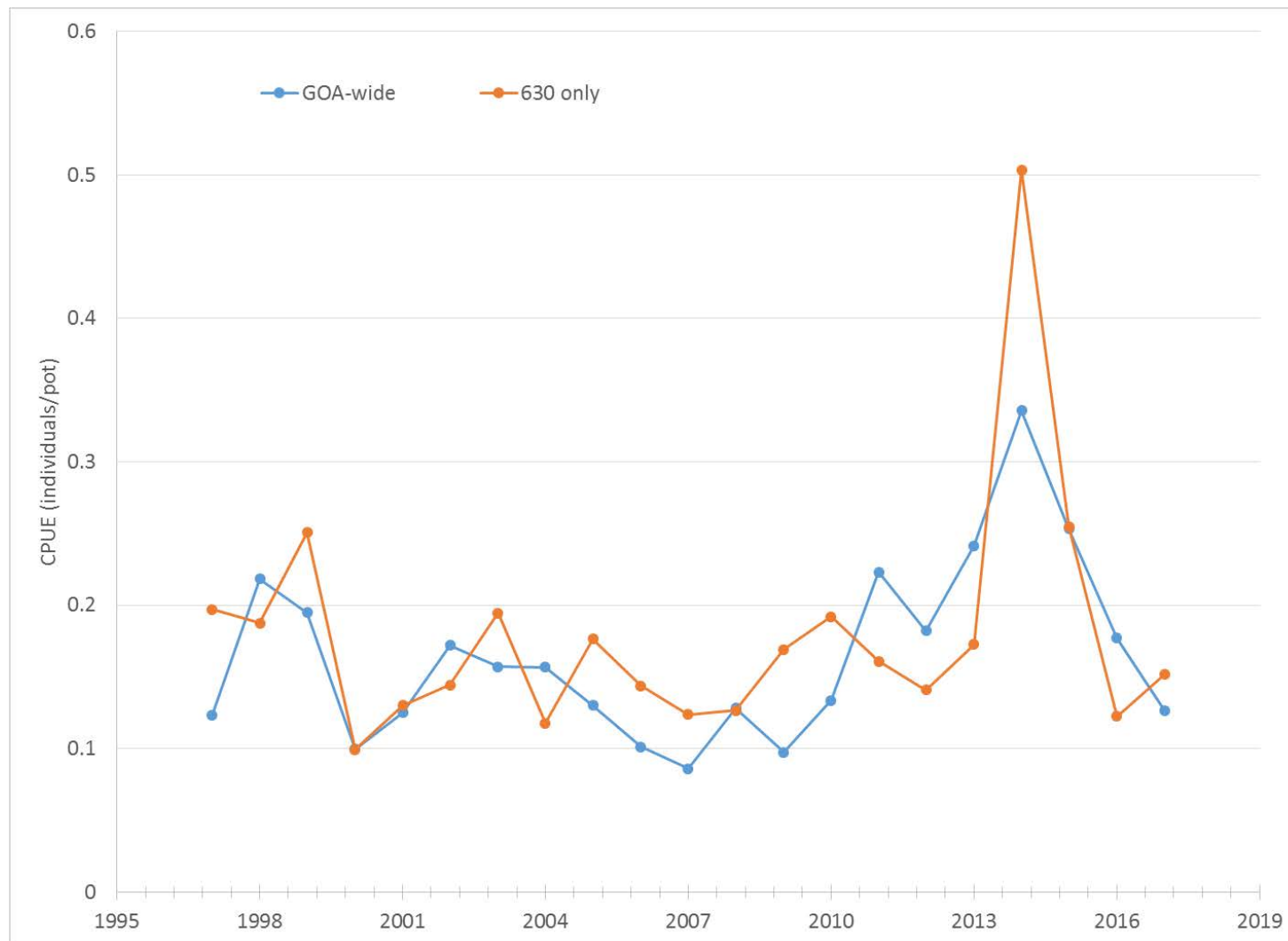
octopus: pot fishery CPUE



octopus fishery size comps



octopus: pot fishery CPUE



harvest recommendations

Harvest Recommendations				
	As estimated or <i>specified last year for:</i>		As estimated or <i>recommended this year for:</i>	
	2017	2018	2018	2019
Quantity				
Tier 6 (RE model biomass * M)	0.53	0.53	0.53	0.53
M	12,270	12,270	1,539	1,539
RE model biomass estimate	6,504	6,504	816	816
OFL (t)	4,878	4,878	612	612
maxABC (t)	4,878	4,878	612	612
ABC (t)				
	As determined <i>last year for:</i>		As determined <i>this year for:</i>	
	2015	2016	2016	2017
Status				
Overfishing	no	n/a	no	n/a

catch vs biomass

