

Predator diets in Atlantis GOA

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Bar plots refer to equilibrium diets in the model - average of the last 5 years of a simulation run. Only species that make up for >5% of the diets are shown.

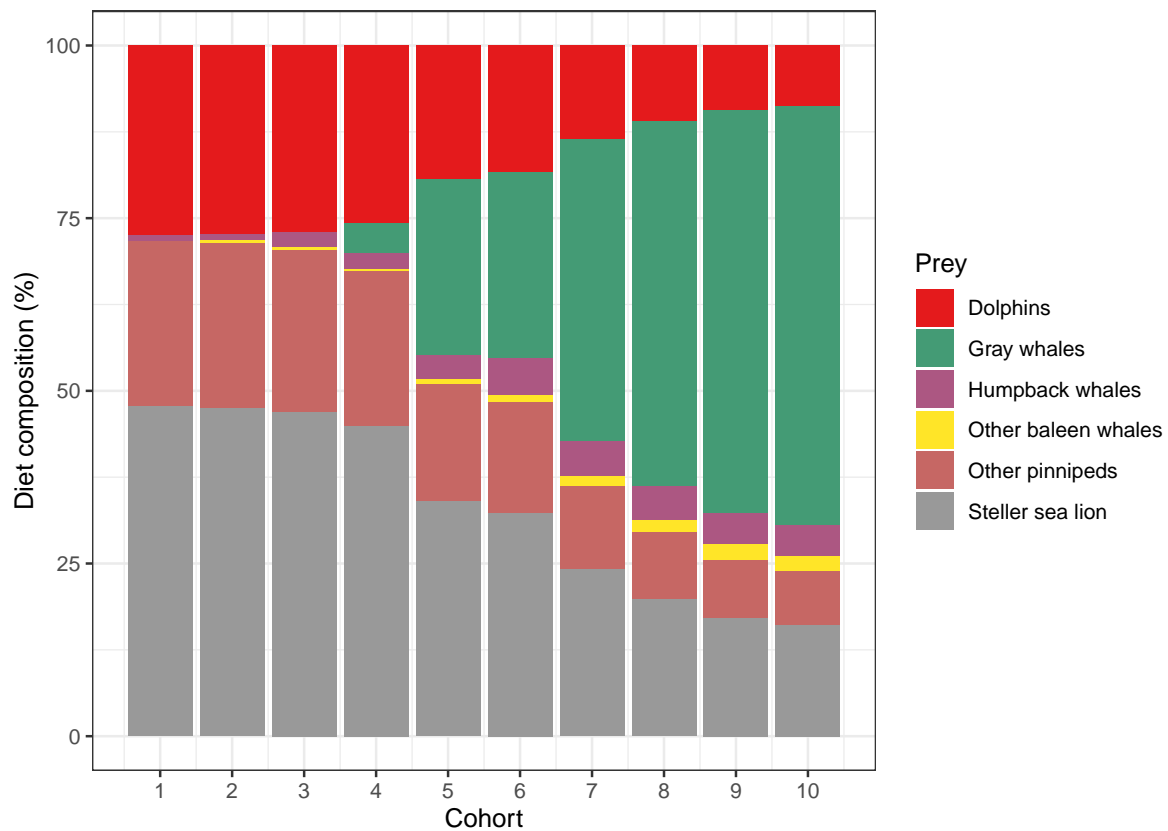
As you can tell many of these are really out of line (e.g. no salmon in resident KW diet). Some of these can be caused by issues with other species (e.g. the prey is absent) and will take some work, but many (most?) can be improved by changing the input diet matrix.

What would help are comments about what needs to be changed. Better diets that you have already prepared for Ecopath would be top.

Table 1: Species composition of the predator groups in Atlantis GOA

Functional group	Main taxa	Proportion of group biomass	Atlantis biomass 1990 (mt)
Transient killer whales	Orcinus orca	1.000	1389
Toothed whales	Sperm whale (Physeter macrocephalus)	1.000	4520
Resident killer whales	Orcinus orca	1.000	5351
Dolphins and porpoises			4394
	Pacific white-sided dolphin (Lagenorhynchus obliquidens)	0.480	
	Harbor porpoise (Phocoena phocoena)	0.220	
	Dall's porpoise (Phocoenoides dalli)	0.300	
Gray whales	Eschrichtius robustus	1.000	254982
Humpback whales	Megaptera novaeangliae	1.000	100540
Other baleen whales			64268
	Minke whale (Balaenoptera acutorostrata)	0.010	
	Fin whale (Balaenoptera physalus)	0.980	
	Right whale (Eubalaena japonica)	0.010	
Steller sea lion	Eumetopias jubatus	1.000	5804
Other pinnipeds			7299
	Northern fur seal (Callorhinus ursinus)	0.010	
	Elephant seal (Mirounga angustirostris)	0.020	
	Harbor seal (Phoca vitulina)	0.970	
Seabirds diving fish			4420
	Sooty shearwater (Ardenna grisea)	0.520	
	Horned puffin (Fratercula corniculata)	0.110	
	Tufted puffin (Fratercula cirrhata)	0.320	
	Common murre (Uria aalge)	0.040	
Seabirds diving plankton			83
	Cassin's auklet (Ptychoramphus aleuticus)	0.680	
	Parakeet auklet (Aethia psittacula)	0.180	
	Crested auklet (Aethia cristatella)	0.150	
Seabirds surface fish			290
	Laysan albatross (Phoebastria immutabilis)	0.004	
	Common gull (Larus brachyrhynchus)	0.004	
	Black-legged kittiwake (Rissa tridactyla)	0.890	
	Black-footed albatross (Phoebastria nigripes)	0.010	
Seabirds surface plankton			386
	Northern fulmar (Fulmarus glacialis)	0.830	
	Fork-tailed storm petrel (Hydrobates furcatus)	0.120	
	Leach's storm petrel (Hydrobates leucorhous)	0.050	

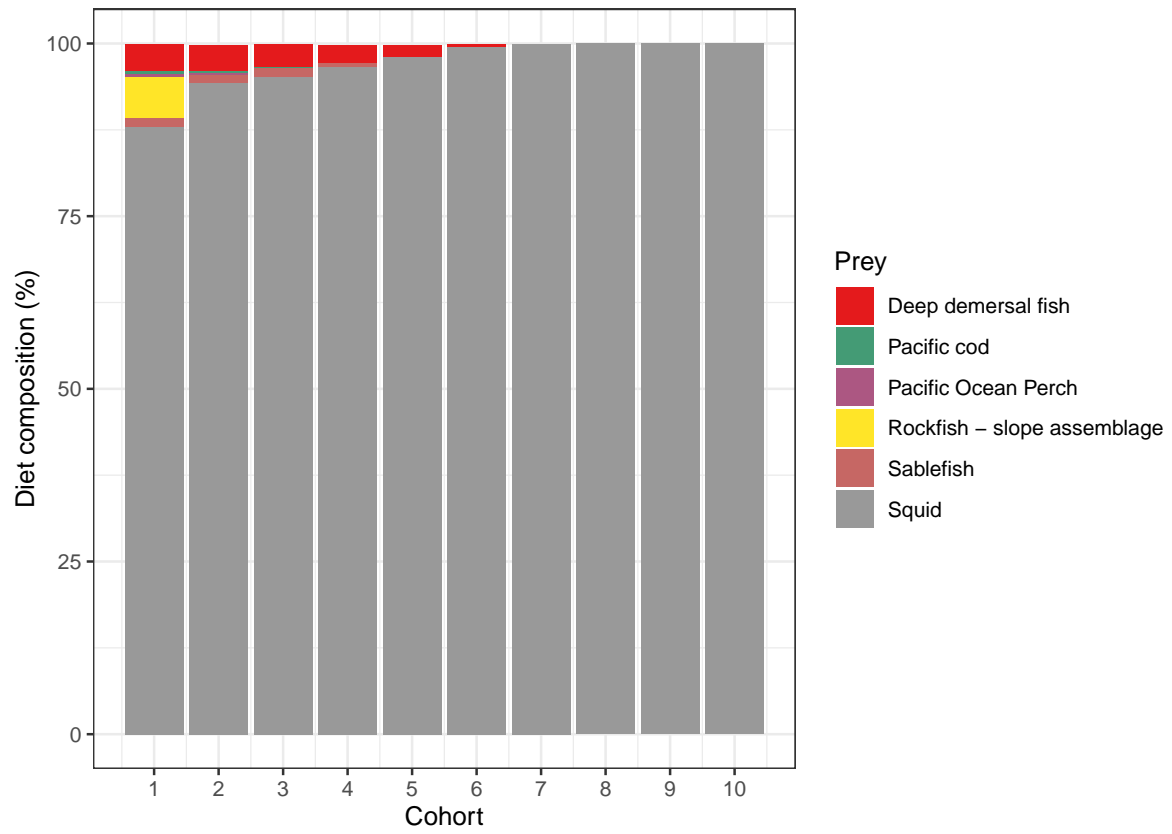
Transient killer whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–5	661.88
2	6–10	2282.59
3	11–15	3585.32
4	16–20	4348.52
5	21–25	4745.04
6	26–30	4940.71
7	31–35	5035.03
8	36–40	5080.02
9	41–45	5101.36
10	46–50	5111.47

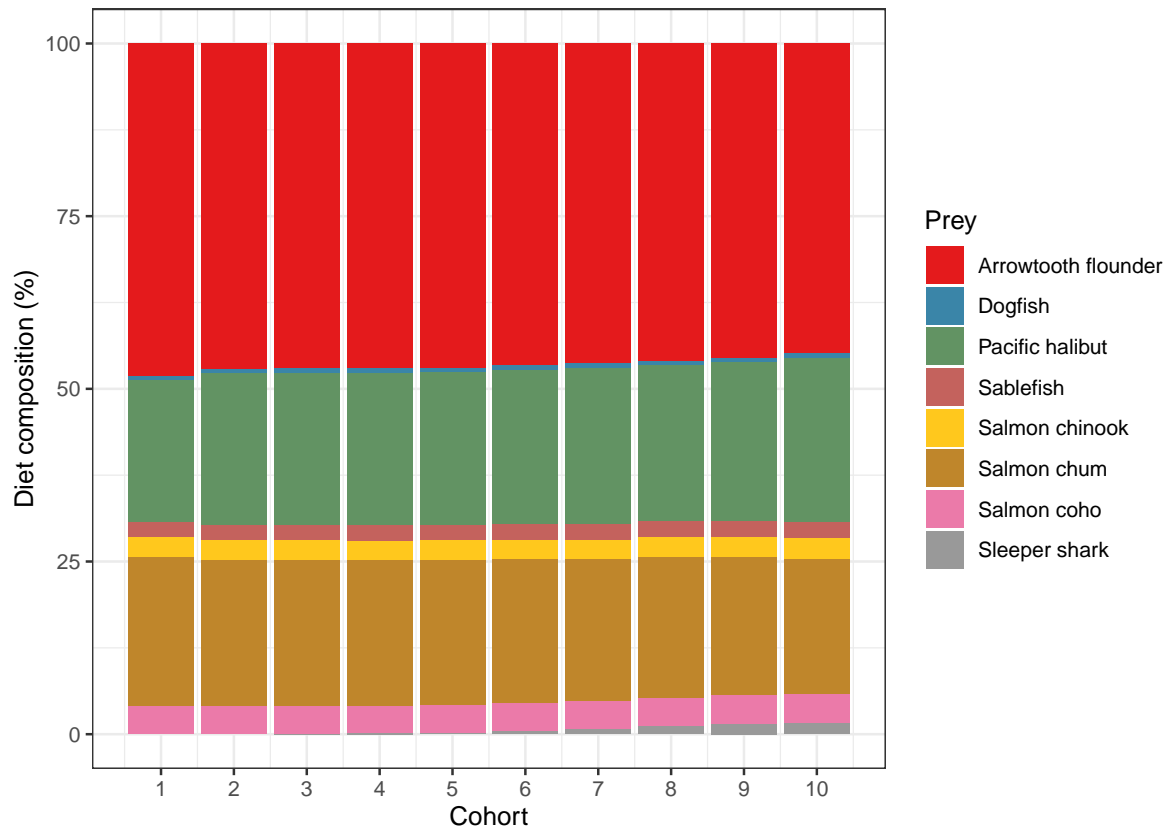
Toothed whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–5	553.28
2	6–10	3114.07
3	11–15	7509.18
4	16–20	12912.05
5	21–25	18568.15
6	26–30	23968.47
7	31–35	28833.15
8	36–40	33047.50
9	41–45	36600.18
10	46–50	39536.92

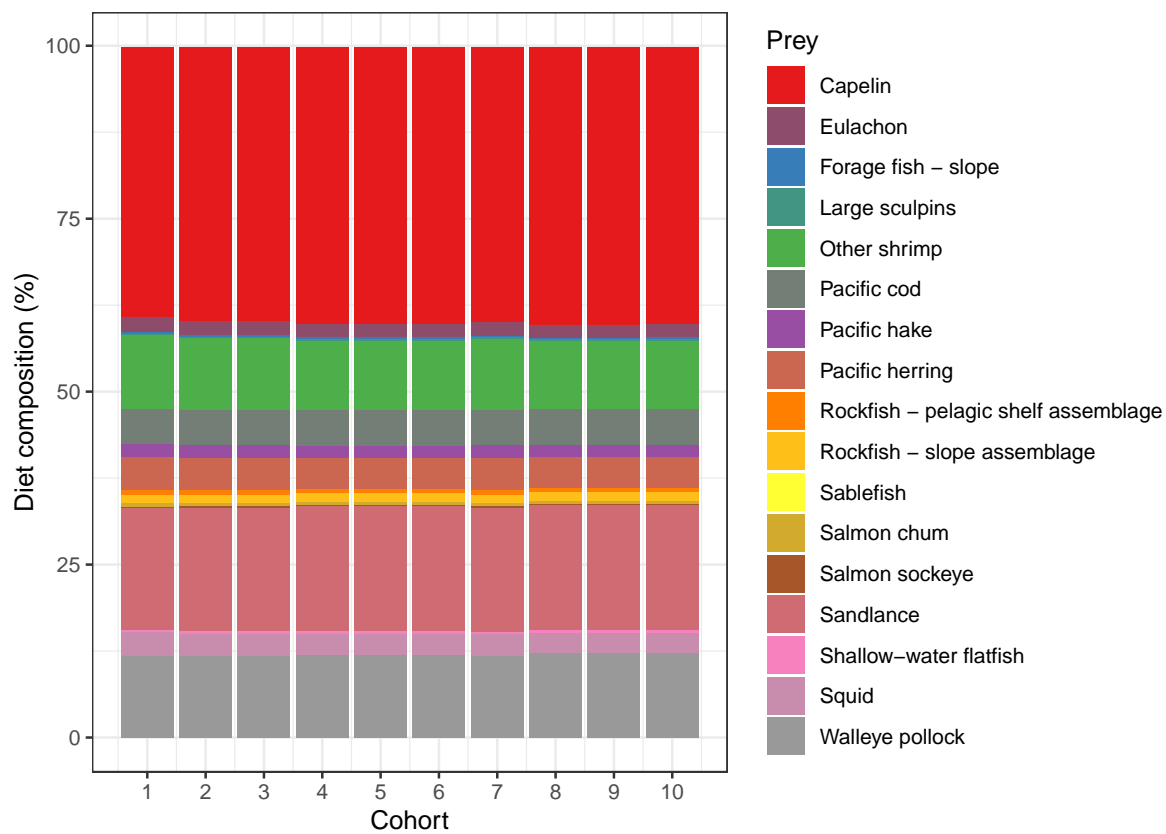
Resident killer whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–5	661.88
2	6–10	2282.59
3	11–15	3585.32
4	16–20	4348.52
5	21–25	4745.04
6	26–30	4940.71
7	31–35	5035.03
8	36–40	5080.02
9	41–45	5101.36
10	46–50	5111.47

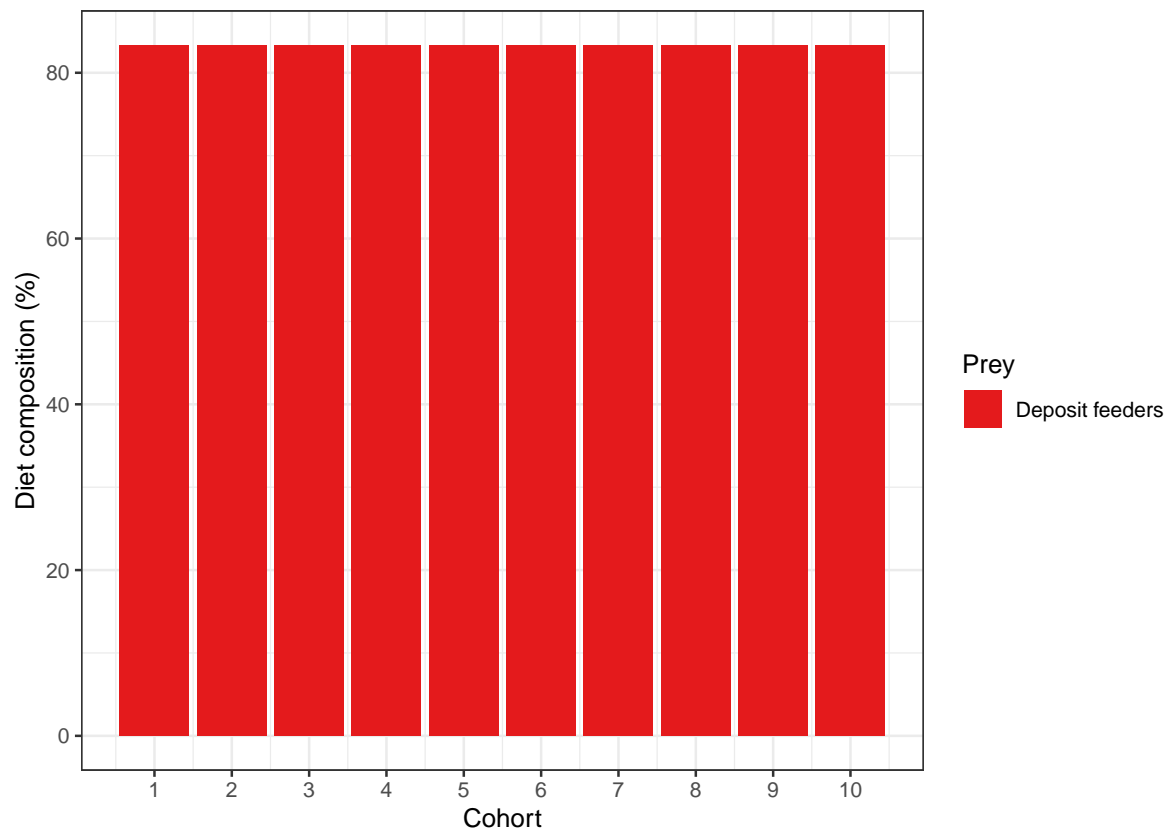
Dolphins



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–2	43.61
2	3–4	94.81
3	5–6	117.24
4	7–8	125.22
5	9–10	127.90
6	11–12	128.78
7	13–14	129.07
8	15–16	129.16
9	17–18	129.19
10	19–20	129.20

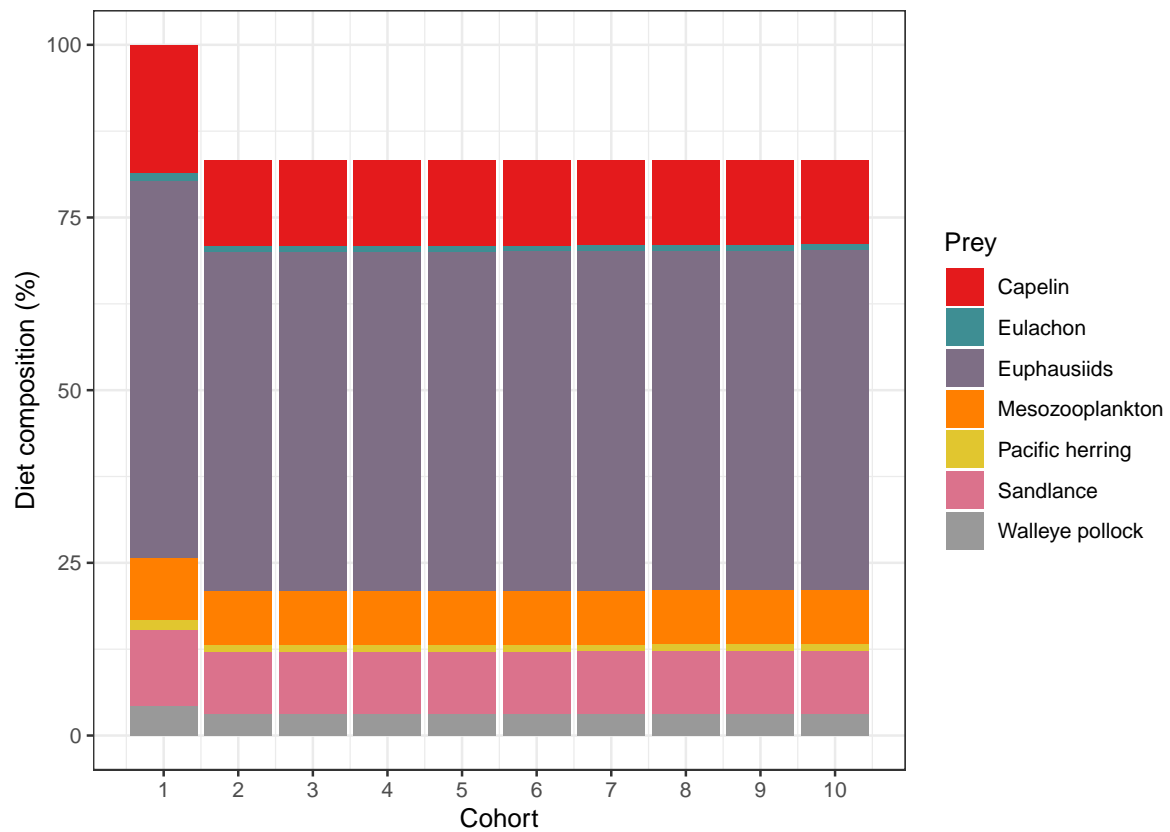
Gray whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–6	5194.62
2	7–12	11780.93
3	13–18	14683.79
4	19–24	15703.04
5	25–30	16038.62
6	31–36	16146.94
7	37–42	16181.68
8	43–48	16192.80
9	49–54	16196.36
10	55–60	16197.50

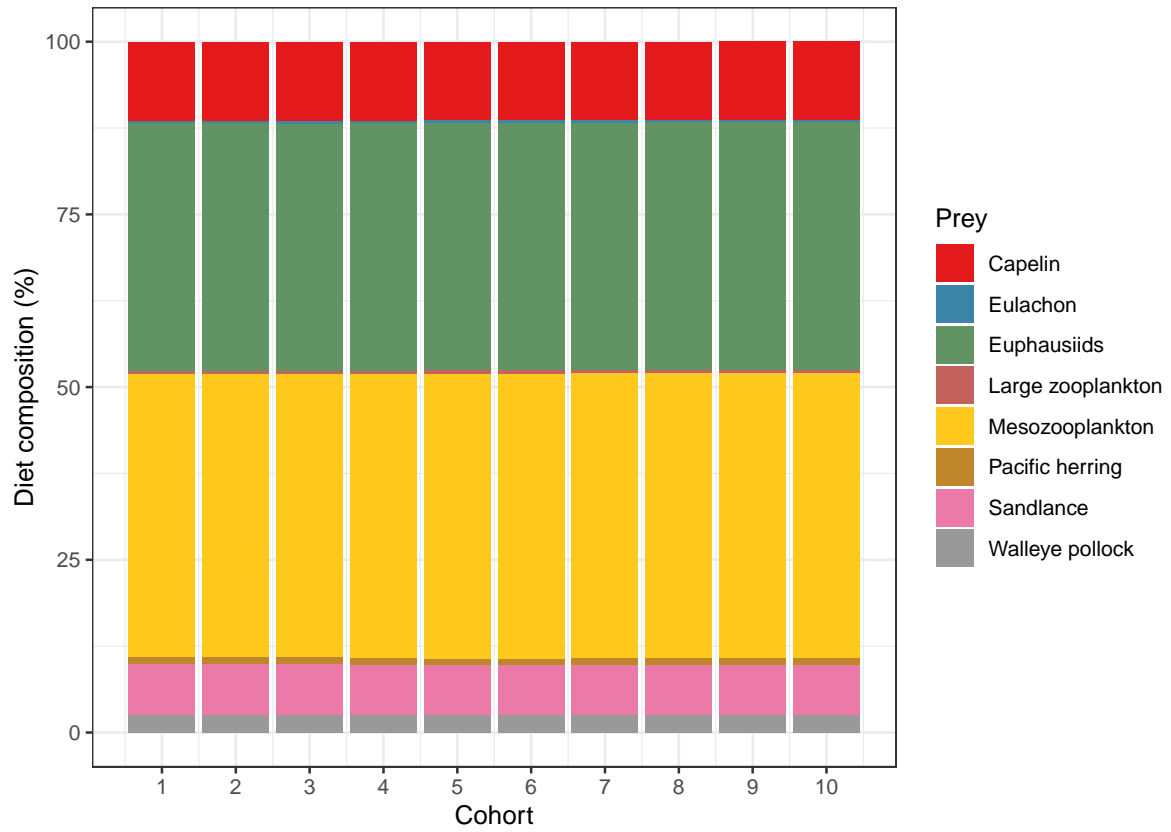
Humpback whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–5	730.27
2	6–10	2807.24
3	11–15	5574.30
4	16–20	8504.47
5	21–25	11287.70
6	26–30	13772.46
7	31–35	15905.76
8	36–40	17689.98
9	41–45	19155.19
10	46–50	20342.74

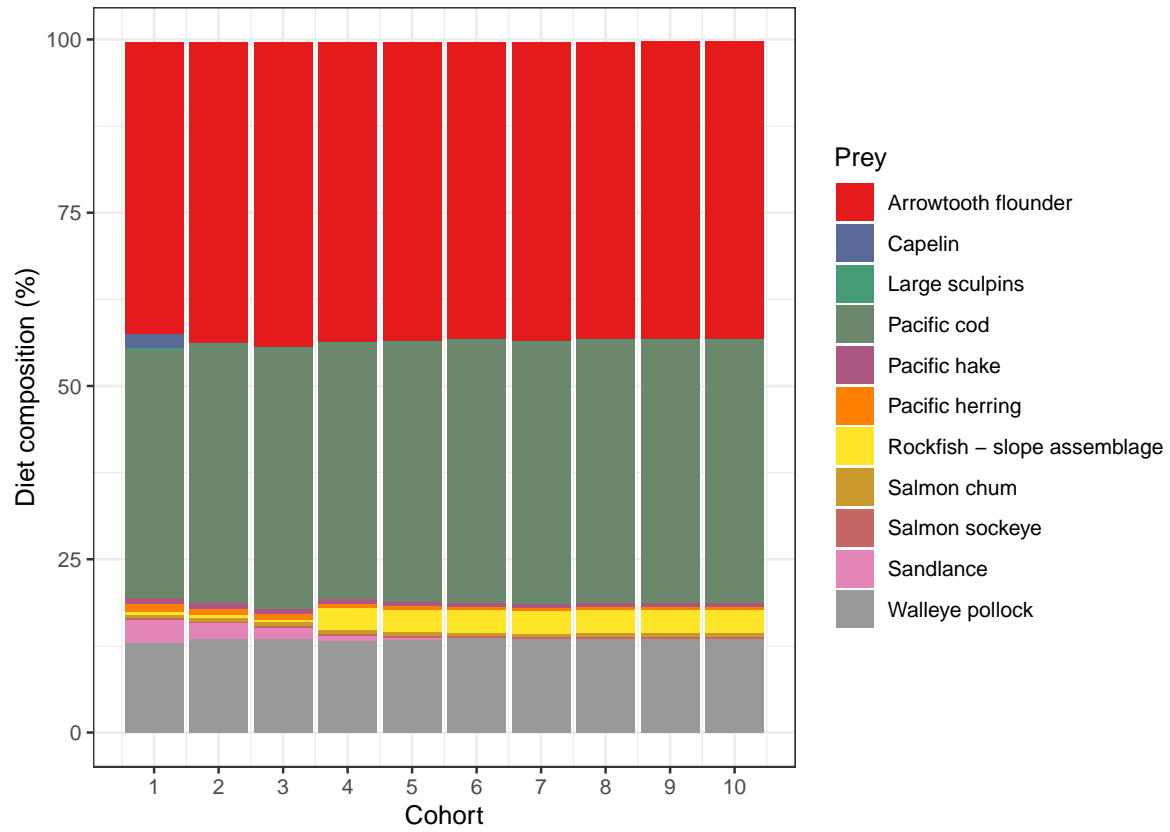
Other baleen whales



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–5	1910.85
2	6–10	7493.40
3	11–15	13310.78
4	16–20	17743.67
5	21–25	20700.35
6	26–30	22546.89
7	31–35	23660.59
8	36–40	24319.51
9	41–45	24705.19
10	46–50	24929.54

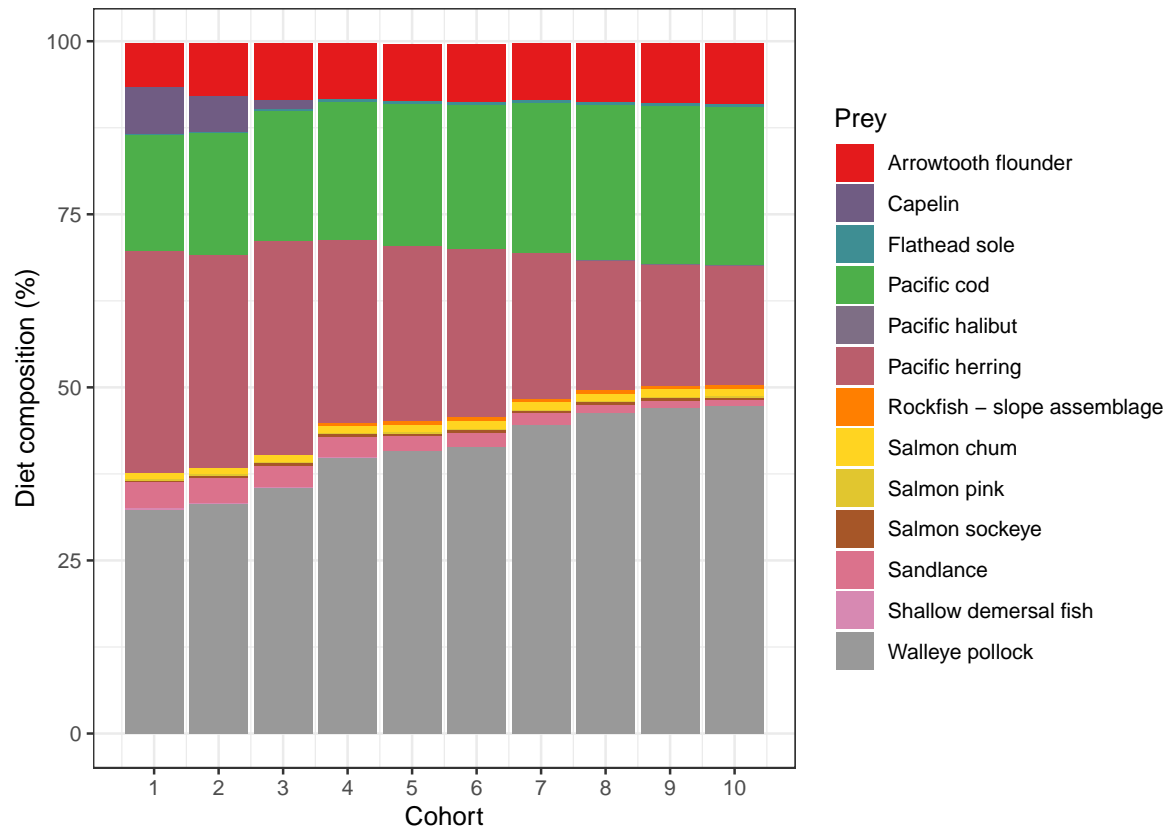
Steller sea lion



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–2	74.69
2	3–4	234.97
3	5–6	360.24
4	7–8	434.39
5	9–10	473.83
6	11–12	493.84
7	13–14	503.78
8	15–16	508.66
9	17–18	511.05
10	19–20	512.22

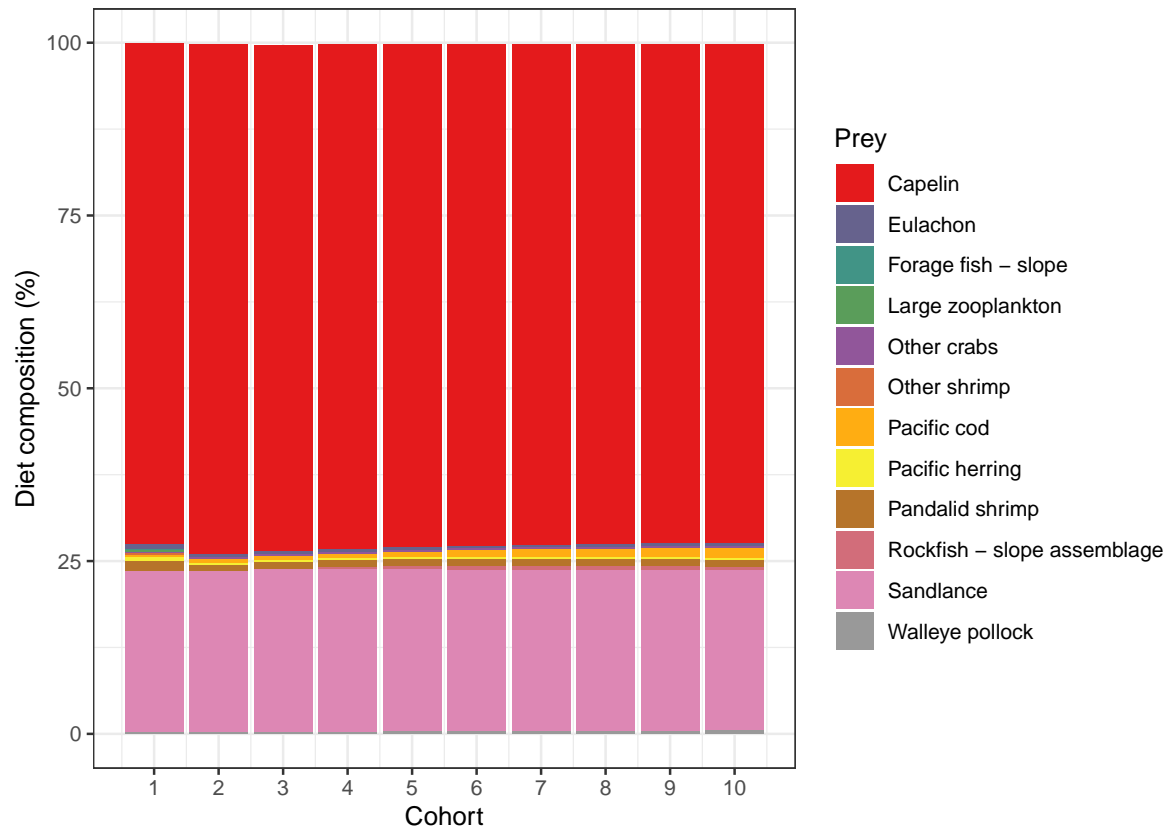
Other pinnipeds



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–2	25.16
2	3–4	101.79
3	5–6	189.05
4	7–8	262.45
5	9–10	316.47
6	11–12	353.57
7	13–14	378.09
8	15–16	393.92
9	17–18	404.01
10	19–20	410.39

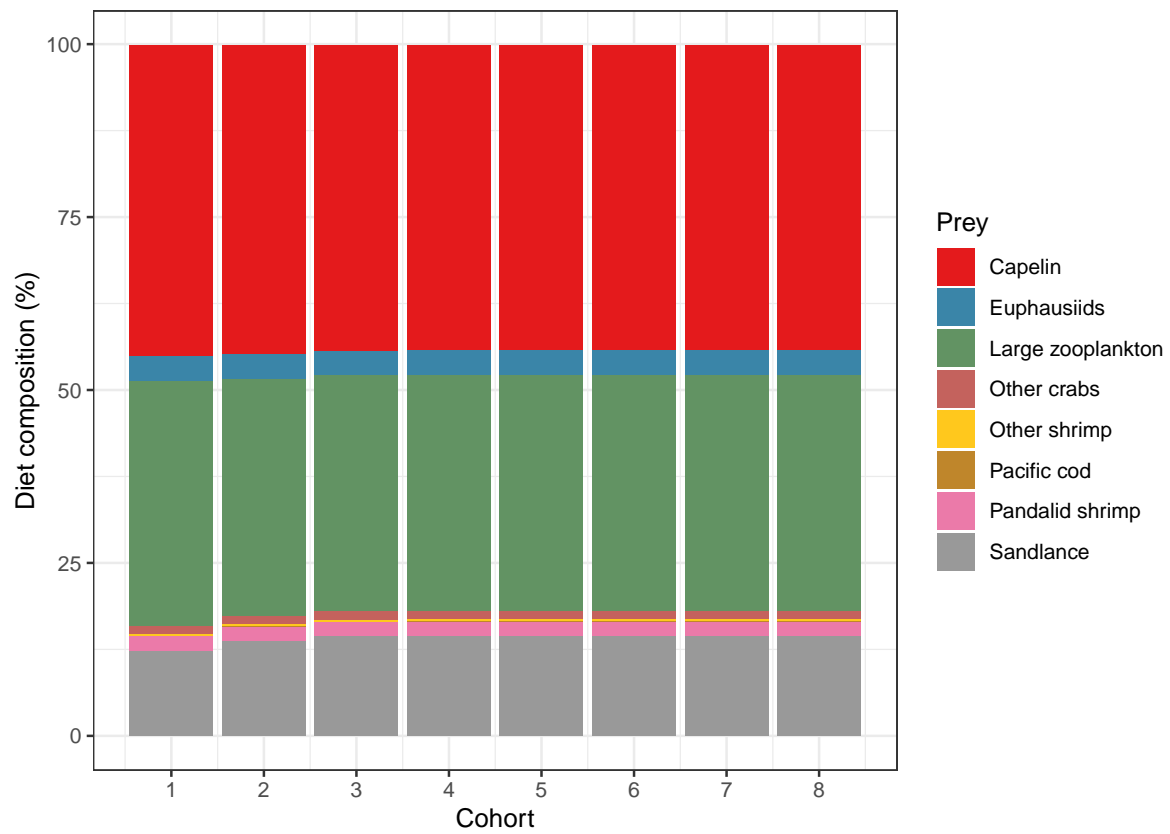
Seabirds diving fish



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–2	0.8
2	3–4	0.8
3	5–6	0.8
4	7–8	0.8
5	9–10	0.8
6	11–12	0.8
7	13–14	0.8
8	15–16	0.8
9	17–18	0.8
10	19–20	0.8

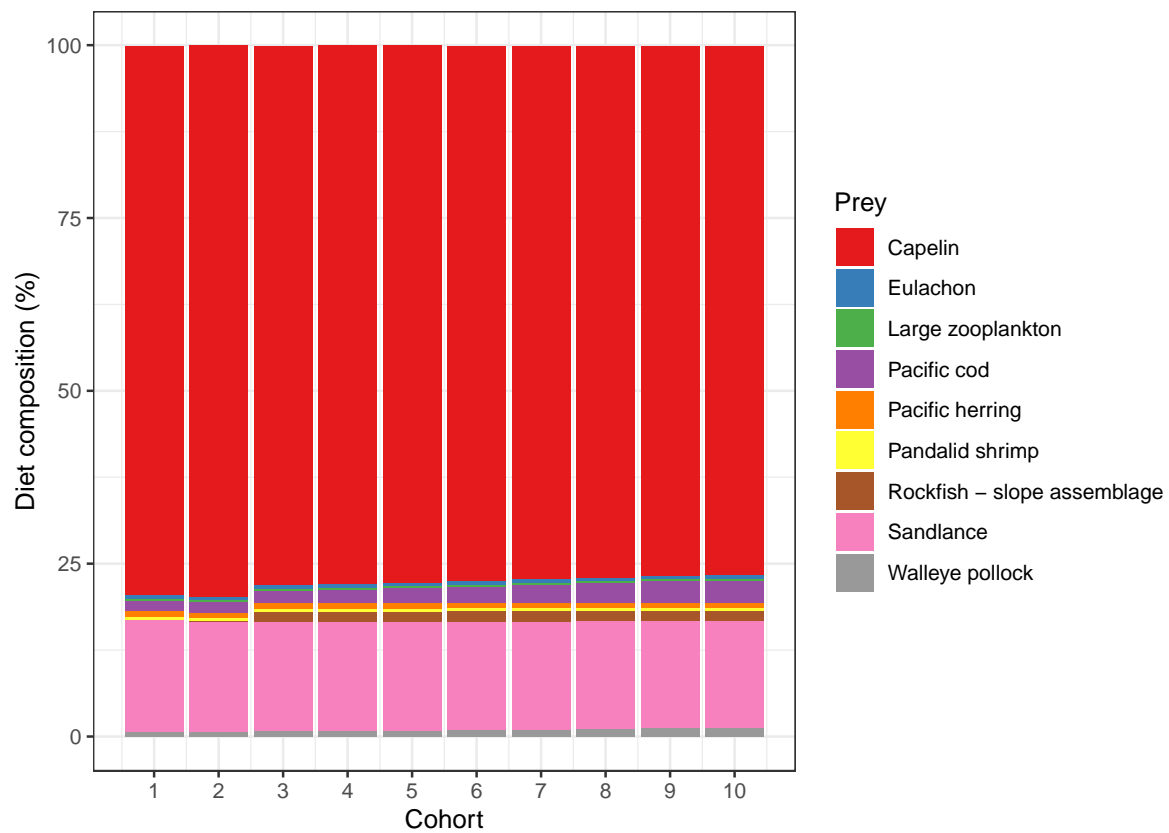
Seabirds diving plankton



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1-1	0.21
2	2-2	0.21
3	3-3	0.21
4	4-4	0.21
5	5-5	0.21
6	6-6	0.21
7	7-7	0.21
8	8-8	0.21

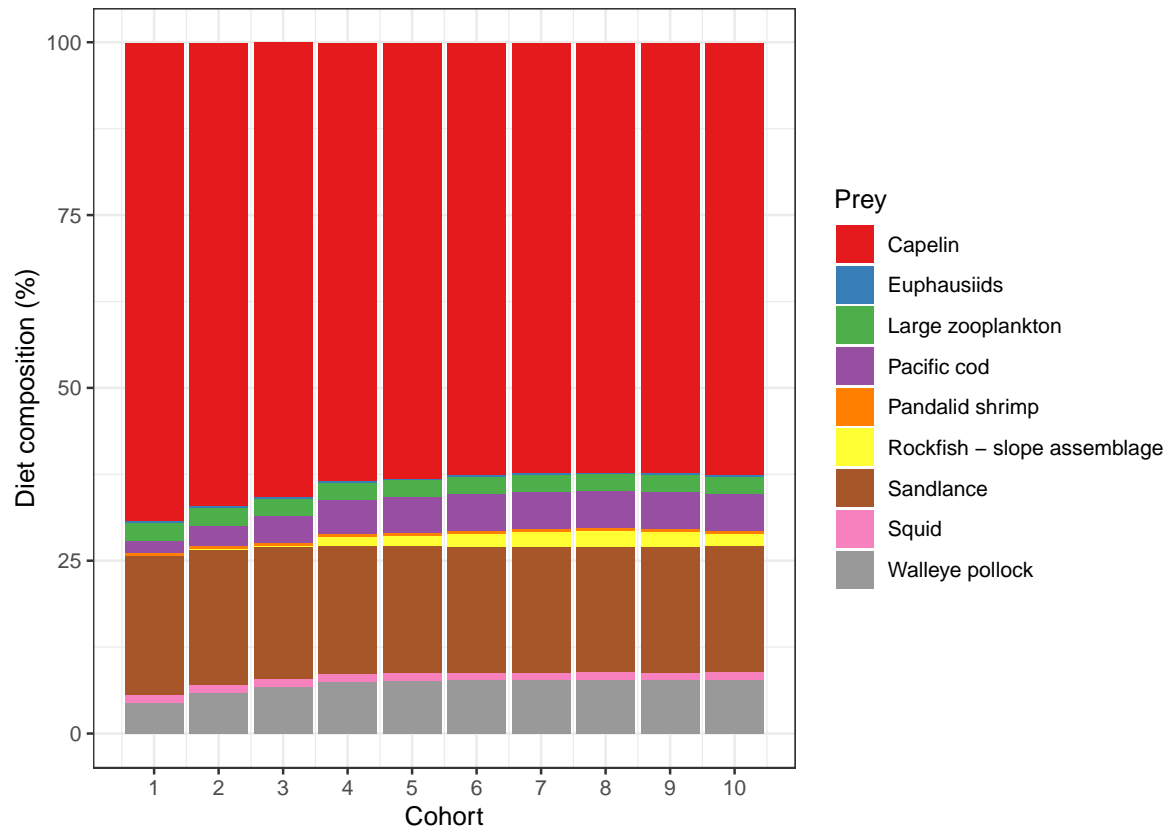
Seabirds surface fish



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–2	0.69
2	3–4	0.69
3	5–6	0.69
4	7–8	0.69
5	9–10	0.69
6	11–12	0.69
7	13–14	0.69
8	15–16	0.69
9	17–18	0.69
10	19–20	0.69

Seabirds surface plankton



Weight at Age (kg)

Cohort	Age	Weight (kg)
1	1–3	0.61
2	4–6	0.61
3	7–9	0.61
4	10–12	0.61
5	13–15	0.61
6	16–18	0.61
7	19–21	0.61
8	22–24	0.61
9	25–27	0.61
10	28–30	0.61