Table S1: Sample sizes of pollock measured for each length bin in each year, lengths separating length bins are in centimeters

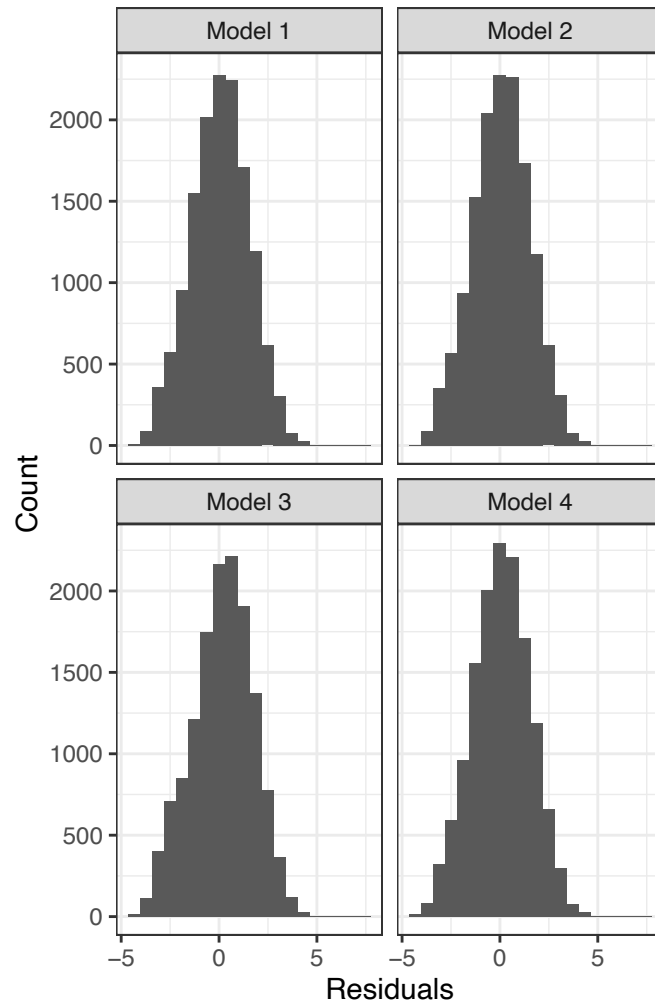| YEAR	0-20	20-30	30-40	40-50	>50
1982	1311	1867	2353	2173	2030
1983	1263	994	2185	3777	3083
1984	1154	455	1256	2769	2922
1985	1661	778	1285	2776	3801
1986	1704	785	939	2541	3938
1987	630	857	1525	2952	3934
1988	1231	523	1302	2964	4306
1989	950	593	1077	3101	4580
1990	1371	449	586	2470	4243
1991	1752	862	512	2438	5084
1992	1406	602	994	1899	5508
1993	1535	736	1358	2859	5998
1994	1653	733	987	2479	5253
1995	1389	681	829	1973	4279
1996	1844	1225	1099	2526	4743
1997	1584	823	1059	2466	4010
1998	1721	1414	1093	3213	3895
1999	1696	999	1070	2361	4701
2000	1509	744	1194	3040	4683
2001	2146	1538	1179	3195	5103
2002	1431	1161	1473	3182	4692
2003	1107	650	1406	3761	4654
2004	1320	964	1097	3582	5447
2005	1259	612	843	3194	4816
2006	1254	446	629	2343	4567
2007	1735	223	311	1525	3364
2008	1240	375	445	1520	3783
2009	1570	530	542	1188	3236
2010	1477	378	854	1761	3828
2011	1447	736	757	2490	5335
2012	1461	682	1572	2611	4373
2013	1756	480	1023	2856	4123
2014	1632	577	838	3849	4735
2015	1902	1093	1954	4606	5311
2016	1563	1003	2062	5342	3960
2017	1985	1027	2213	6751	5584
2018	2418	1600	1749	5945	4525
2019	2897	1477	1460	5868	4875

Figure S1: Distributions of model residuals for the four main (all ages) generalized additive models. These residuals incorporate fixed effects only and treat random effects as error.
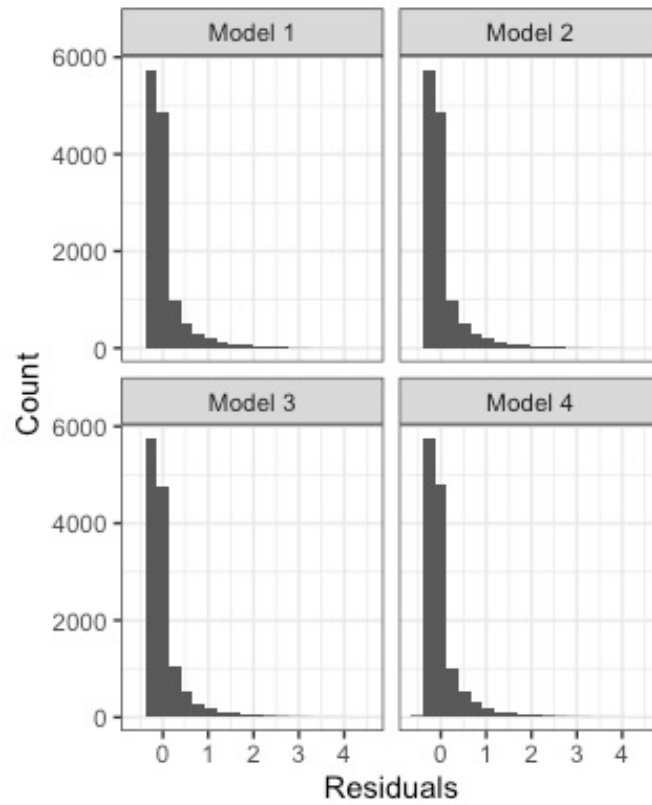
Figure S2: Distributions of model residuals for the four generalized additive models ran on the first length bin (0-20cm). These residuals incorporate fixed effects only and treat random effects as error.
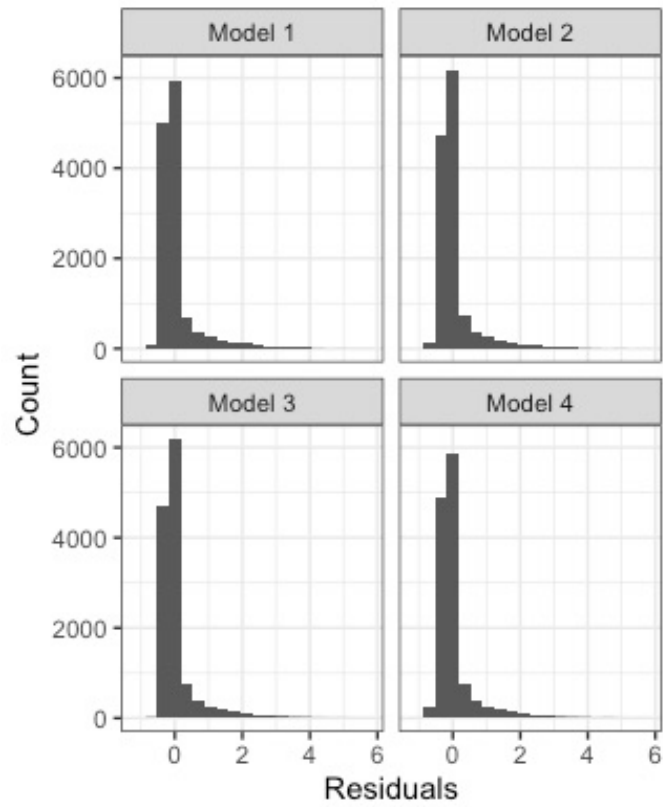
Figure S3: Distributions of model residuals for the four generalized additive models ran on the second length bin (20-30cm). These residuals incorporate fixed effects only and treat random effects as error.
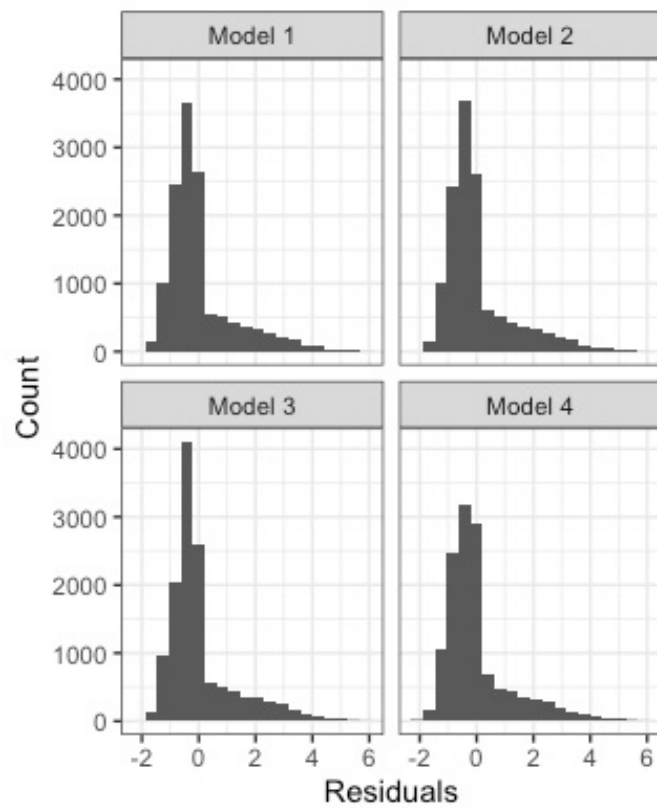
Figure S4: Distributions of model residuals for the four generalized additive models ran on the third length bin (30-40cm). These residuals incorporate fixed effects only and treat random effects as error.
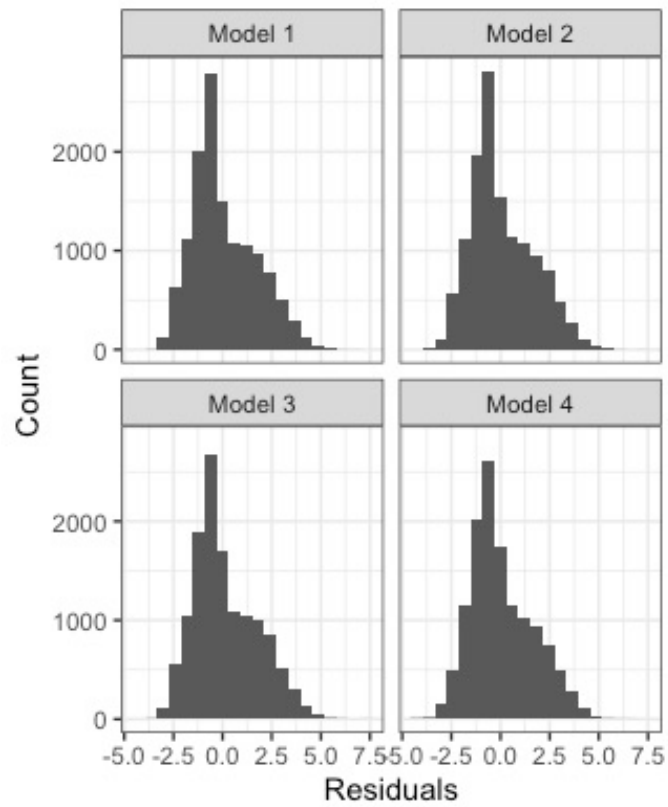
Figure S5: Distributions of model residuals for the four generalized additive models ran on the fourth length bin (40-50cm). These residuals incorporate fixed effects only and treat random effects as error.
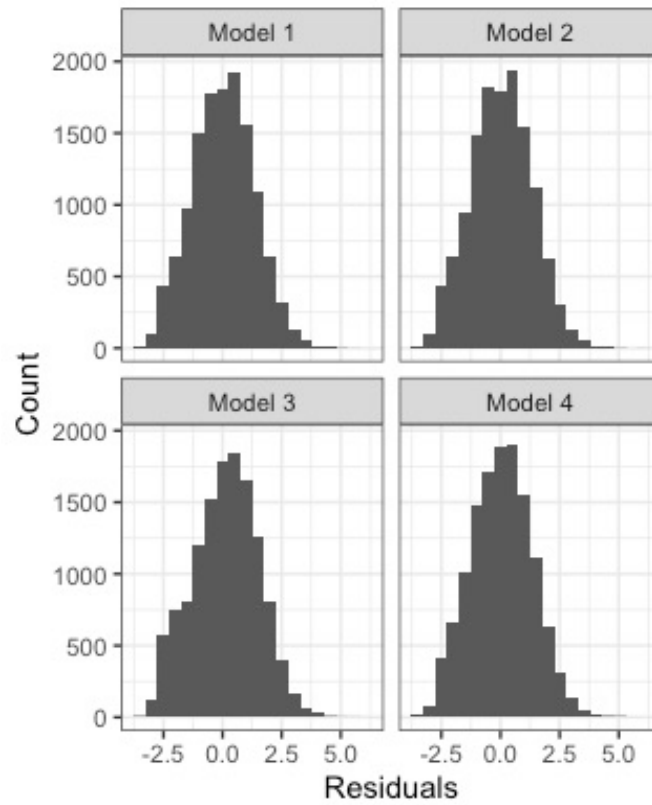
Figure S6: Distributions of model residuals for the four generalized additive models ran on the fifth length bin (>50cm). These residuals incorporate fixed effects only and treat random effects as error.