

Table II. 'Best' models (i.e. smallest Akaike information criterion; AIC) for explaining  $T_L$  of predator species in the Celtic Sea. Explanatory variables, deviance explained, and AIC value for each species 'best' GAM model are given. Significance level is indicated by asterixes: \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ . Degrees of freedom (df), deviance explained, and AIC are also given for GAM models with each significant variable of the 'best' model considered individually

Species	Variables	df	Significance	Deviance	AIC
<b>Cod</b>	$T_L = s(\text{length})$			5.9%	828.6
	$s(\text{length})$	4.0	***	5.9%	828.6
<b>Haddock</b>	$T_L = \text{year} \times \text{subdivision}$			11.3%	576.7
	year	3	***	9.9%	579.2
	subdivision	1	ns	0.8%	613.9
	year*subdivision	5	***	11.3%	576.7
<b>Hake</b>	$T_L = s(\text{length}) + \text{year} + \text{season} \times \text{subdivision}$			42.3%	1065.7
	$s(\text{length})$	6.0	***	16.6%	1312.7
	year	3	***	28.4%	1202.4
	season	1	***	1.8%	1413.8
	subdivision	1	***	21.7%	1259.8
	season*subdivision	3	***	27.2%	1213.8
<b>Megrim</b>	$T_L = s(\text{length}) + \text{year} \times \text{subdivision} + \text{season}$			26.1%	1246.2
	$s(\text{length})$	8.2	***	7.7%	1409.5
	year	3	***	4.0%	1428.4
	subdivision	1	***	2.7%	1434.8
	season	2	***	3.9%	1427.6
<b>Whiting</b>	$T_L = s(\text{length}) + \text{year} + \text{season}$			13.1%	728.3
	$s(\text{length})$	5.6	*	2.8%	785.7
	year	3	***	8.0%	746.6
	season	3	***	4.4%	770.4