

Appendix 2. Model selection for estimation of apparent monthly survival (ϕ) and recapture (p) probabilities for marble and rainbow trout living in sympatry and for marble trout living in allopatry in Upper Idrijca. First, we modelled probability of recapture p by keeping the global model of survival. Then, we used the best model for p to model survival probabilities ϕ . For each candidate model we report the AICc, Delta AICc, AICc weight, Model Likelihood (ML), Number of parameters (N par) and Deviance (Dev).

Model		AICc	Delta AICc	AICc weight	ML	N par	Dev
Modelling capture							
$\phi(t*yob*Distr)$	$p(Distr)$	1837.00	0.00	0.65	1.00	68	404.91
$\phi(t*yob*Distr)$	$p(sector)$	1839.76	2.76	0.16	0.25	71	400.77
$\phi(t*yob*Distr)$	$p(s + sector)$	1841.49	4.49	0.07	0.11	72	400.18
$\phi(t*yob*Distr)$	$p(s + Distr)$	1841.51	4.50	0.07	0.10	70	404.82
$\phi(t*yob*Distr)$	$p(species)$	1844.00	6.99	0.02	0.03	69	409.61
$\phi(t*yob*Distr)$	$p(w)$	1845.84	8.84	0.01	0.01	74	399.90
$\phi(t*yob*Distr)$	$p(yob)$	1846.75	9.75	0.00	0.01	75	398.48
Modelling survival							
$p(Distr)$	$\phi(Distr)$	1811.04	0	0.31	1.00	6	512.61
$p(Distr)$	$\phi(s*Distr)$	1812.64	1.60	0.14	0.45	9	508.11
$p(Distr)$	$\phi(s + Distr)$	1813.04	1.99	0.11	0.37	7	512.58
$p(Distr)$	$\phi(t + Distr)$	1813.39	2.34	0.09	0.31	16	494.50
$p(Distr)$	$\phi(Sector)$	1813.70	2.65	0.08	0.26	5	517.29
$p(Distr)$	$\phi(s*Sector)$	1813.80	2.76	0.07	0.25	7	513.34
$p(Distr)$	$\phi(t + Sector)$	1814.01	2.96	0.07	0.23	15	497.18