

Table S1: The numbers and the available data about sex, maturation and escape history for escapees captured below the fish trap in 2017 and 2018.

	2017	2018
Escaped salmon	22	26*
Weight (\pm SD)	3.0 \pm 1.8	3.6 \pm 1.7
Recent escapees	22	22
Males (mature)	14 (2)	NA
Females (mature)	8 (1)	NA
Early escapees	0	0

*Sex and maturation stages are not available for fish captured in 2018. Data about escape history is available for 22 of the 26 fish captured in 2018.

Table S2: Results from the Anova for the generalised linear model (1.2) investigating differences in the weight of escaped farmed salmon. Significant terms are shown in bold.

	Chi square	Df	P value
Time of Escape	16.63	1	0.000
Sex	3.96	1	0.047
Maturation Stage	7.93	1	0.005
Genetic cluster	181.55	24	0.000
Time of escape x Maturation stage	0.38	1	0.535
Sex x Maturation stage	6.69	1	0.010
Time of escape x Sex	28.43	1	0.000

Table S3: Pairwise comparisons between genetic clusters within the years where significant differences were detected for weight. Top diagonal: p values. Significant differences are shown in bold.

	2014	Cluster 1	Cluster 2	Cluster 3	Cluster 4	None
Ave W (g)		3.09	4.06	0.95	5.09	3.07
Cluster 1			0.894	0.011	0.014	1.000
Cluster 2				0.000	0.728	0.938
Cluster 3					0.000	0.032
Cluster 4						0.073

	2015	Cluster 1	Cluster 2	Cluster 3	Cluster 4	None
Ave W (g)		5.75	3.50	3.25	5.87	4.60
Cluster 1			0.000	0.000	1.000	0.539
Cluster 2				0.999	0.000	0.956
Cluster 3					0.000	0.123
Cluster 4						0.558

	2016	Cluster 1	Cluster 2	Cluster 3	Cluster 4	None
Ave W (g)		3.87	3.44	5.02	3.37	3.41
Cluster 1			1.000	0.973	0.999	1.000
Cluster 2				0.589	1.000	1.000
Cluster 3					0.553	0.808
Cluster 4						1.000

	2017	Cluster 1	Cluster 2	Cluster 3	Cluster 4	None
Ave W (g)		4.18	3.78	3.40	6.46	4.20
Cluster 1			1.000	1.000	1.000	0.991
Cluster 2				1.000	1.000	1.000
Cluster 3					1.000	1.000
Cluster 4						0.779

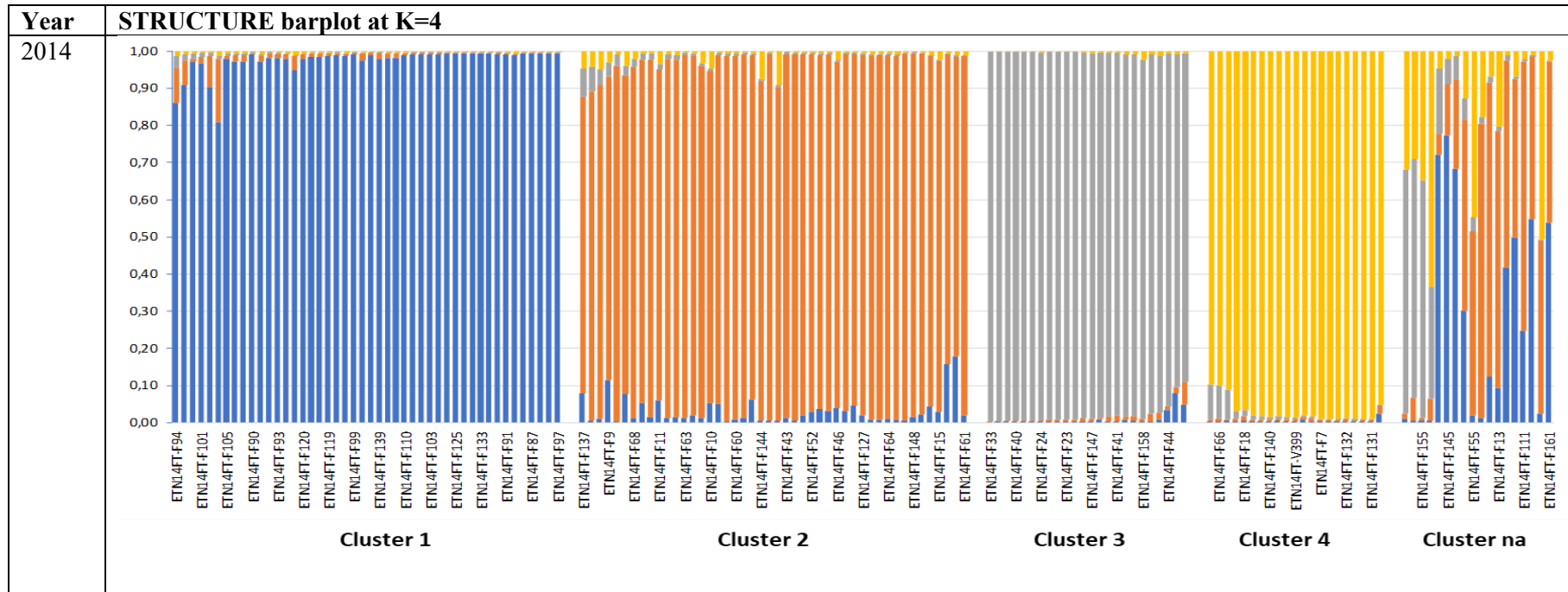
	2018	Cluster 1	Cluster 2	Cluster 3	Cluster 4	None
Ave W (g)		3.91	5.20	2.68	5.20	4.44
Cluster 1			0.378	0.868	1.000	1.000
Cluster 2				0.007	1.000	0.970
Cluster 3					0.397	0.966
Cluster 4						1.000

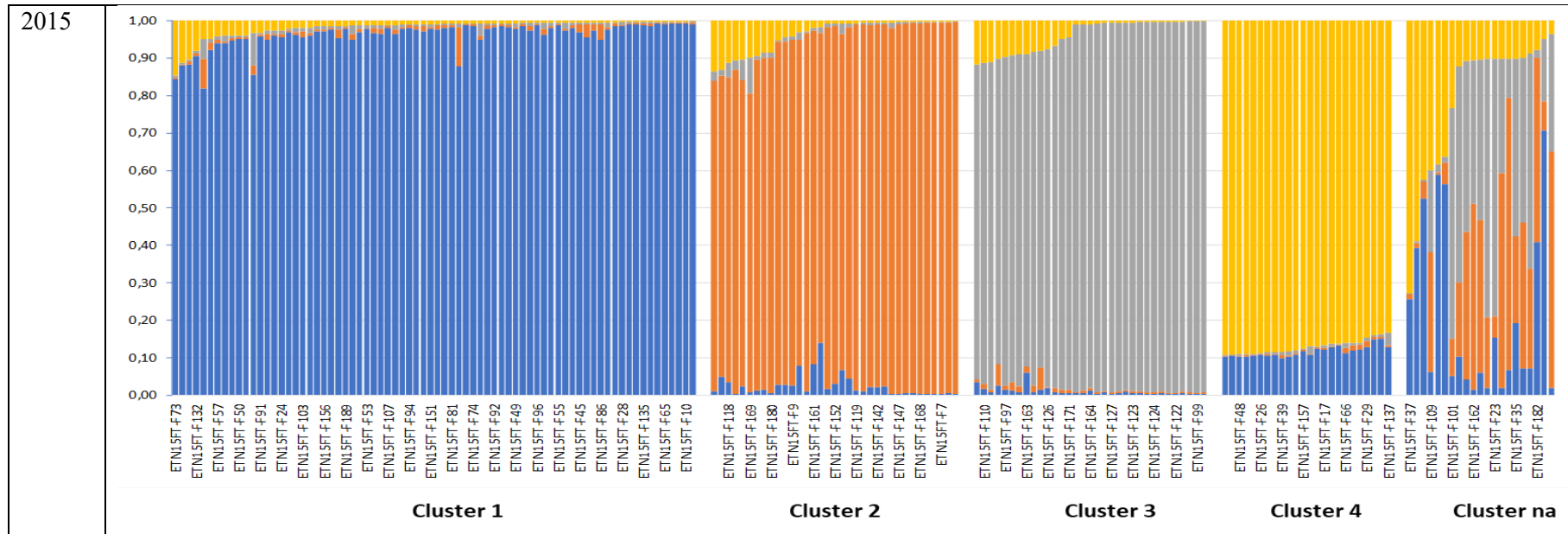
Table S4: Results of the Mood’s median tests to determine whether there were significant differences in median day of ascending between fish of different maturity statuses, sexes, time of escape and genetic cluster.

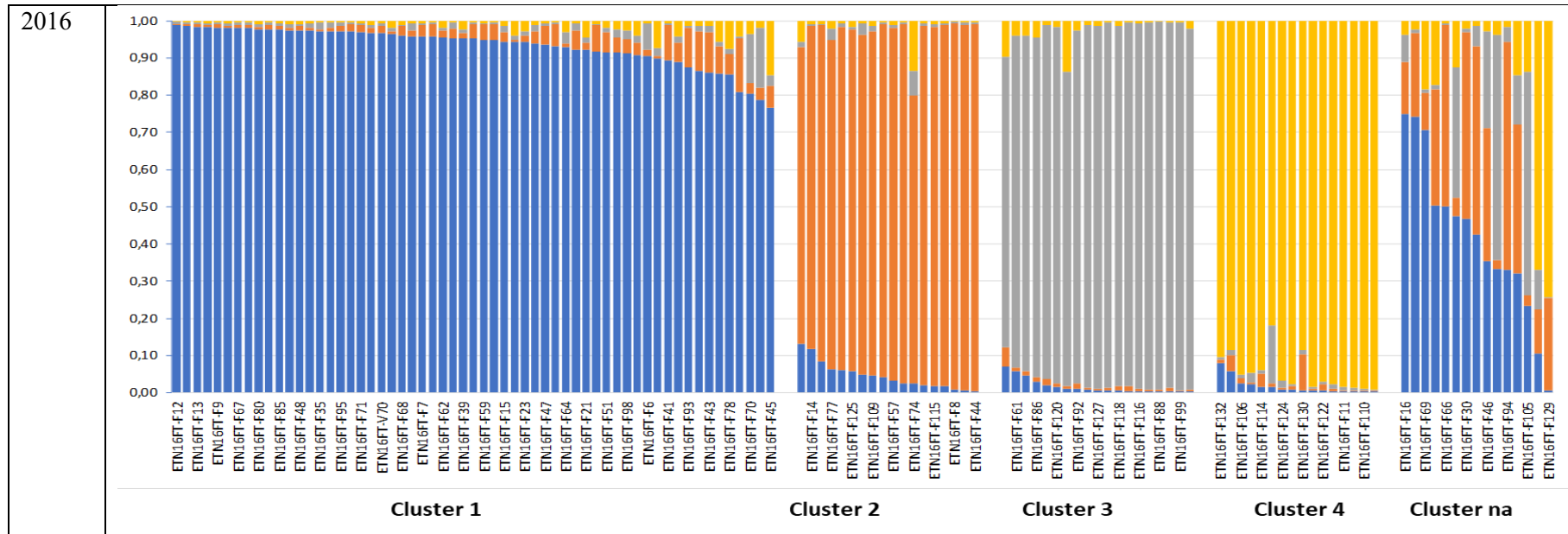
Year	Group	Median 1	Median 2	Difference in Medians	Chi square	Df	P value
2014	Maturity Status (I - M)	287	250.5	36.5	22.49	1	0.000
	Sex (F - M)	287	251	36	25.47	1	0.000
	Time of Escape (E - L)	271	285	-14	2.54	1	0.111
	Genetic cluster				60.36	4	0.000
2015	Maturity Status (I - M)	228	217	11	2.19	1	0.139
	Sex (F - M)	214	2223	-9	1.44	1	0.230
	Time of Escape (E - L)	247	214	33	16.77	1	0.000
	Genetic cluster				42.32	4	0.000
2016	Maturity Status (I - M)	179	194	-15	6.21	1	0.013
	Sex (F - M)	178	189	-11	8.24	1	0.004
	Time of Escape (E - L)	247	180	67	3.47	1	0.062
	Genetic cluster				29.08	4	0.000
2017	Maturity Status (I - M)	220	220	6	0.00	1	1.000
	Sex (F - M)	230	217	13	0.09	1	0.768
	Time of Escape (E - L)	230	219	11	0.58	1	0.446
	Genetic cluster				10.35	4	0.035
2018	Maturity Status (I - M)	237	240.5	-3.5	0.00	1	1.000
	Sex (F - M)	238	242	-4	0.21	1	0.650
	Time of Escape (E - L)	258	239	19	0.51	1	0.474
	Genetic cluster				8.27	4	0.082

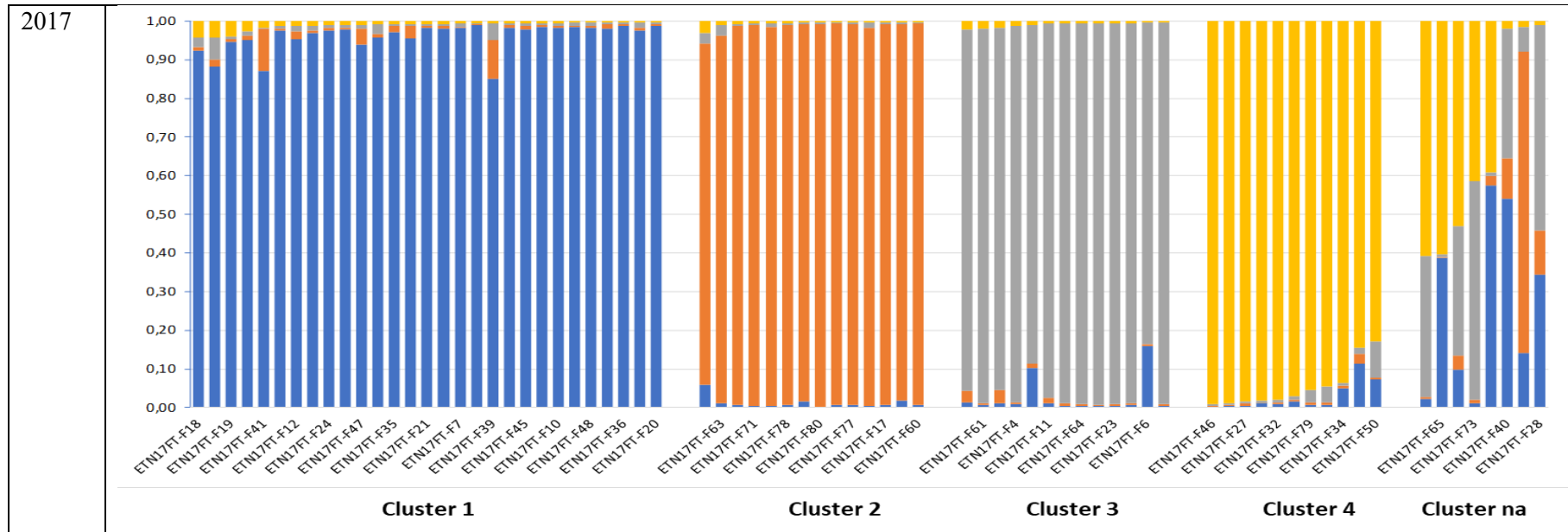
Table S5: Pairwise comparisons between genetic clusters within the years where significant differences were detected for median day of ascending. Bottom diagonal: p values; top diagonal: difference in the MDA between two clusters. Significant differences are shown in bold.

Median	287	250	234	271	285
2014	Cluster 1	Cluster 2	Cluster 3	Cluster 4	No cluster
Cluster 1	-	37	53	16	2
Cluster 2	0.002	-	16	21	35
Cluster 3	0.003	0.061	-	37	51
Cluster 4	1.000	0.937	0.453	-	14
No cluster	1.000	1.000	0.003	1.000	-
Median	205	247	236	192	222
2015	Cluster 1	Cluster 2	Cluster 3	Cluster 4	No cluster
Cluster 1	-	43	32	13	18
Cluster 2	0.001	-	10	55	25
Cluster 3	0.000	0.257	-	44	30
Cluster 4	1.000	0.000	0.000	-	30
No cluster	1.000	0.087	1.000	1.000	-
Median	175	178	209	266	182
2016	Cluster 1	Cluster 2	Cluster 3	Cluster 4	No cluster
Cluster 1	-	3	34	91	7
Cluster 2	1.000	-	31	88	4
Cluster 3	0.000	0.261	-	57	27
Cluster 4	0.005	0.174	0.245	-	84
No cluster	1.000	1.000	0.368	0.027	-
Median	217	258	198	230	239
2017	Cluster 1	Cluster 2	Cluster 3	Cluster 4	No cluster
Cluster 1	-	41	19	13	22
Cluster 2	0.049	-	60	28	19
Cluster 3	1.000	1.000	-	32	41
Cluster 4	1.000	1.000	1.000	-	9
No cluster	1.000	1.000	1.000	1.000	-









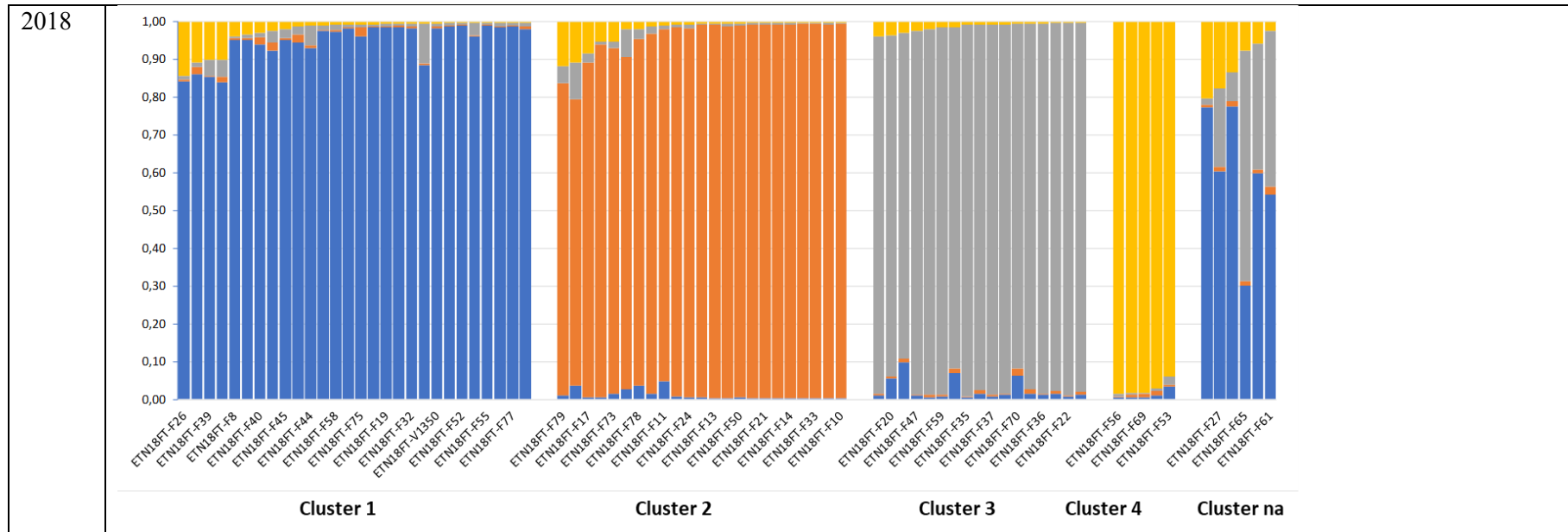


Fig. S1: Barplots of STRUCTURE at K=4 for individuals sampled in the period 2014-2018. Individuals were assigned to cluster based upon a threshold of q-value ≥ 0.75 . Fish failing to reach the threshold value were gathered in the so-called «non- assigned» group.