

Genetic diversity in mitochondrial DNA reveals the effect of a Fisheries Protection Zone on exploited marine species in the Menorca Channel (Western Mediterranean)

Biodiversity and Conservation

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Table S1 PCR amplification conditions for each analysed species

Species	Initial denaturation	Denaturation	Annealing	Extension	Final extension
<i>Mullus surmuletus</i>	94 °C, 2 min	94 °C, 30 s	52 °C, 1 min	72 °C, 1 min	72 °C, 10 min
		35 cycles			
<i>Serranus cabrilla</i>	94 °C, 2 min	94 °C, 30 s	52 °C, 1 min	72 °C, 1 min	72 °C, 10 min
		35 cycles			
<i>Scorpaena notata</i>	94 °C, 2 min	94 °C, 30 s	51 °C, 1 min	72 °C, 1 min	72 °C, 10 min
		35 cycles			
<i>Octopus vulgaris</i>	95 °C, 2 min	94 °C, 1 min	52 °C, 1 min	72 °C, 1 min	72 °C, 10 min
		35 cycles			

Table S2 Confidence Intervals (95% CI) obtained by bootstrapping COI-DNA sequences for each studied zone and calculating the nucleotide diversity values with 1,000 replications for each species

95% Confidence Intervals			
	FPZ	SCI	ADJ
<i>Mullus surmuletus</i>	0.0019 - 0.0036	0.0015 - 0.0025	0.0021 - 0.0033
<i>Serranus cabrilla</i>	0.0080 - 0.0101	0.0064 - 0.0100	0.0074 - 0.0098
<i>Scorpaena notata</i>	0.0020 - 0.0047	0.0007 - 0.0018	0.0016 - 0.0031
<i>Octopus vulgaris</i>	0.0040 - 0.0057	0.0043 - 0.0055	0.0038 - 0.0057

Table S3 Non-parametric Kruskal-Wallis test to analyse the statistical differences between groups within each species, and Dunn's *post hoc* test used to determine which groups differ from the others. p-values from Dunn's *post hoc* test were adjusted for multiple comparisons using the Bonferroni correction. X^2 = chi-square; df = degrees of freedom. Bolded p-values indicate statistically significant results, based on 1,000 bootstrap replicates of COI sequences for each zone and species

<i>Mullus surmuletus</i>			
Kruskal-Wallis test	X^2	df	p-value
	1543.50	2	< 0.000
Dunn's <i>post hoc</i> test			p-value
FPZ - SCI			< 0.000
FPZ - ADJ			1.75E-01
SCI - ADJ			< 0.000
<i>Serranus cabrilla</i>			
Kruskal-Wallis test	X^2	df	p-value
	372.37	2	< 0.000
Dunn's <i>post hoc</i> test			p-value
FPZ - SCI			< 0.000
FPZ - ADJ			< 0.000
SCI - ADJ			< 0.000
<i>Scorpaena notata</i>			
Kruskal-Wallis test	X^2	df	p-value
	2359.80	2	< 0.000
Dunn's <i>post hoc</i> test			p-value
FPZ - SCI			0.000
FPZ - ADJ			< 0.000
SCI - ADJ			< 0.000
<i>Octopus vulgaris</i>			
Kruskal-Wallis test	X^2	df	p-value
	148.08	2	< 0.000
Dunn's <i>post hoc</i> test			p-value
FPZ - SCI			< 0.000
FPZ - ADJ			< 0.000
SCI - ADJ			1.52E-01

Table S4 Pairwise fixation index (Φ_{st}) (below diagonal) and corresponding p-value (above diagonal) for each pair of comparisons. Values in bold were significant at the 95% confidence interval

<i>Mullus surmuletus</i>			
	FPZ	SCI	ADJ
FPZ	--	0.5676	0.0901
SCI	-0.0107	--	0.1532
ADJ	0.0364	0.0254	--
<i>Serranus cabrilla</i>			
	FPZ	SCI	ADJ
FPZ	--	0.4775	0.7478
SCI	-0.0074	--	0.4144
ADJ	-0.0221	-0.0042	--
<i>Scorpaena notata</i>			
	FPZ	SCI	ADJ
FPZ	--	0.0740	0.0120
SCI	0.0267	--	0.3989
ADJ	0.0332	0.0021	--
<i>Octopus vulgaris</i>			
	FPZ	SCI	ADJ
FPZ	--	0.5045	0.8378
SCI	-0.0135	--	0.2793
ADJ	-0.0266	0.0052	--