

Table 1. Concentrations of organochlorine compounds (ng/ml w.w.) in plasma samples of European pond turtles from the two sites: Esquineau and Faïsses. Means and SD are calculated considering all the data (i.e. levels > LQ and data < LQ by assigning them zero for value). SD : standard deviation ; Df : Detection frequency ; LQ : limit of quantification (calculated as nine times the signal-to-noise ratio using the spiked matrices).

Variable	Esquineau (n=126)					Faïsses (n=48)					
	LQ	Mean	±	SD	Max	Df (%)	Mean	±	SD	Max	Df (%)
<i>Organochlorine pesticides</i>											
Alpha HCH	1.9	0.04	±	0.29	2.39	2	0.00	±	0.00	0.00	0
beta HCH	0.9	0.08	±	0.39	3.22	5	0.02	±	0.14	0.98	2
Delta HCH	1.3	0.03	±	0.23	2.19	2	0.08	±	0.37	2.22	4
HCB	0.2	0.02	±	0.10	0.77	7	0.07	±	0.18	1.00	19
Aldrin	1	0.01	±	0.09	1.03	1	0.02	±	0.17	1.16	2
Isobenzan	0.6	0.02	±	0.11	0.79	2	0.17	±	0.50	2.02	13
Heptachlor epoxid	1.2	0.33	±	1.19	7.81	9	0.00	±	0.00	0.00	0
44'-DDE	1.1	0.04	±	0.29	2.33	2	0.05	±	0.34	2.30	2
44'-DDD	1.1	0.18	±	1.12	9.77	3	0.14	±	0.56	2.49	6
44'-DDT	2.4	0.05	±	0.41	3.62	2	0.00	±	0.00	0.00	0
<i>PCBs</i>											
PCB-28	1	0.14	±	0.53	3.16	8	0.00	±	0.00	0.00	0
PCB-52	0.2	0.54	±	1.30	10.18	36	0.73	±	0.91	3.80	69
PCB-77	1	0.02	±	0.19	2.18	1	0.02	±	0.17	1.15	2
PCB-81	0.9	0.02	±	0.21	2.10	2	0.02	±	0.17	1.16	2
PCB-101	2.3	0.06	±	0.48	4.82	2	0.00	±	0.00	0.00	0
PCB-123	2.6	0.02	±	0.23	2.61	1	0.00	±	0.00	0.00	0
PCB-138	1.8	0.23	±	0.94	7.28	8	0.07	±	0.27	1.27	6
PCB-153	0.2	0.22	±	0.34	1.57	46	0.13	±	0.25	1.03	29
PCB-169	1.4	0.01	±	0.17	1.86	1	0.00	±	0.00	0.00	0
PCB-180	0.3	0.02	±	0.10	0.72	2	0.03	±	0.14	0.83	4
PCB-189	0.4	0.02	±	0.13	1.14	2	0.02	±	0.13	0.87	2

Table 2. Results from a generalized linear models (GLM) with binomial distribution and a logit link function model with POP levels having an occurrence greater than 10% as dependent variables (PCB-52, -153 and HCB), as a function of sex, sampling site, and their interaction, sampling date and age (or mass).

	PCB-52		PCB-153		HCB	
	χ^2	p value	χ^2	p value	χ^2	p value
Sex	1.699	0.192	0.162	0.688	0.433	0.511
Site	14.347	< 0.001	4.488	0.034	4.052	0.044
Date	1.289	0.256	0.951	0.329	3.828	0.050
Sex x Site	2.659	0.103	0.285	0.594	0.306	0.580
Age class*	4.870	0.182	10.603	0.014	0.840	0.840
Mass*	2.119	0.146	0.264	0.608	0.760	0.383

* Age class and mass were not tested in the same GLM since these two variables were highly correlated (see methods).

Table 3. The effects for sex, sampling site, age, date or mass on pollutant levels were tested, using Peto-Prentice tests (group comparisons) and tobit models (linear regressions).

	HCB		PCB-52		PCB-153	
	Peto-Prentice tests					
	χ^2	p value	χ^2	p value	χ^2	p value
Sex	0.7	0.403	1.1	0.3	0.6	0.444
Site	5.2	0.022	12.3	< 0.001	3.7	0.054
Age class	1	0.8	6.7	0.082	9.5	0.023
	Tobit models					
	Wald	p value	Wald	p value	Wald	p value
Mass	0.498	0.481	0.086	0.769	1.265	0.261
Date	2.814	0.093	0.191	0.662	0.607	0.436