

**Supplementary material**

## Appendix 1.

**Table A1.** Clutch sizes of the collared flycatchers (*Ficedula albicollis*) in this study.

Clutch size	4	5	6	7	8
Number of nests	1	17	89	74	1

Our protocol of egg injection aimed to inject hormones into the eggs before the onset of incubation. In the cases when clutch size was less than 6 (18 nests, i.e. 9.9%) and the females started incubation before the end of laying, eggs might have been incubated for a few hours to a half day at the time of injection. However, this is unlikely to affect our results as egg injection treatment was pre-assigned before we could know the final clutch size and eventually clutch size did not differ between the two treatments.

**Table A2.** Collared flycatcher nestling sex with respect to thyroid hormone (TH) injection treatment.

	TH-injected eggs	Control eggs
Male	77	66
Female	65	64

**Table A3.** Hatching success among TH-injected eggs and CO eggs in the study of great tits, rock pigeons, and collared flycatchers

Species	TH-injected eggs	CO eggs	Reference
<b>Great tit,</b> <i>Parus major</i>	50.3%	49.8%	Ruuskanen et al. 2016
<b>Rock pigeon,</b> <i>Columba livia</i>	71.3%	52.5%	Hsu et al. 2017
<b>Collared flycatcher,</b> <i>Ficedula albicollis</i>	70.4%	63.1%	this study

References:

Hsu, B.-Y., Dijkstra, C., Darras, V.M., de Vries, B., Groothuis, T.G.G. (2017) Maternal thyroid hormones enhance hatching success but decrease nestling body mass in the rock pigeon (*Columba livia*). *Gen. Comp. Endocrinol.* 240: 174-181.

Ruuskanen, S., Darras, V.M., Visser, M.E., Groothuis, T.G.G. (2016) Effects of experimentally manipulated yolk thyroid hormone levels on offspring development in a wild bird species. *Horm. Behav.* 81: 38-44.