

## Supplementary material

Mean values for each biodiversity quality in each study (WKH = woodland key habitat, PF = production forest), the effect sizes (Fisher's z-transform) and variances. Dead wood volumes are in m<sup>3</sup>/ha. Diversity of dead wood is the number of different dead wood types. For species quantities, *number* refers to mean species richness and *records* refer to mean number of observations.

Study	Data point	WKH	PF	Effect size	Variance
Djupström et al. 2008	Dead wood volume	31.5	24.9	0.156	0.0286
Djupström et al. 2008	Deciduous dead wood volume	5.6	1.7	0.4295	0.0286
Djupström et al. 2008	Diversity of dead wood	7.5	5.1	0.3598	0.0286
Djupström et al. 2008	Red-listed beetles (number)	0.75	0.06	0.0905	0.0286
Djupström et al. 2008	Saproxyllic beetles (number)	19.2	14.8	0.4721	0.0286
Djupström et al. 2008	Saproxyllic beetles (records)	175.7	117.2	0.2687	0.0286
Froster 2005	Indicator bryophytes (number)	1.6	0.2	0.6332	0.0667
Froster 2005	Indicator lichens (number)	4.7	2	0.5449	0.0667
Froster 2005	Polypores (number)	1.1	0.3	0.4453	0.0667
Froster 2005	Vascular plants (number)	0.7	0.6	0.0871	0.0667
Gjerde 2007*	Red-listed species (records)			0.1708	0.003
Gustafsson 2000	Red-listed and ind. vascular plants (records)	91	31.7	0.3026	0.037
Gustafsson 2000	Red-listed and ind. vascular plants (records)	34.6	15.1	0.1838	0.0313
Gustafsson 2000	Red-listed and ind. vascular plants (total number)	21	18	1.1155	0.037
Gustafsson 2000	Red-listed and ind. vascular plants (total number)	22	15	1.6296	0.0313
Gustafsson 2002*	Red-listed bryophytes (records)	0.7	0.8	-0.2313	0.0313
Gustafsson 2002*	Red-listed bryophytes (records)	1.8	1	0	0.0588
Gustafsson 2002*	Red-listed bryophytes (records)	3.8	0.5	0.3667	0.037
Gustafsson 2002*	Red-listed lichens (records)	2.2	1.8	-0.0493	0.037
Gustafsson 2002*	Red-listed lichens (records)	1.7	0.2	0.7201	0.0313
Gustafsson 2002*	Red-listed lichens (records)	2.9	0.5	0.6611	0.0588
Gustafsson et al. 2004	Red-listed and ind. bryophytes (records)	6.4	2.5	0.5319	0.0313
Gustafsson et al. 2004	Red-listed and ind. bryophytes (records)	17.9	3.7	0.2332	0.037
Hottola & Siitonen 2008	Polypores (number)	10.1	7.9	0.1149	0.0625
Hottola & Siitonen 2008	Polypores (number)	9.4	7.1	0.2448	0.0588
Hottola & Siitonen 2008	Polypores (number)	13.6	11.5	0.1953	0.0588

Hottola & Siitonen 2008	Polypores (number)	8.3	4.2	0.5756	0.0588
Hottola & Siitonen 2008	Polypores (number)	9.5	9.2	0.041	0.0588
Hottola & Siitonen 2008	Polypores (number)	11.2	7.9	0.4892	0.0588
Hottola & Siitonen 2008	Polypores (number)	11.3	9.2	0.2399	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0.33	0.2	0.1159	0.0625
Hottola & Siitonen 2008	Red-listed polypores (number)	0.3	0.2	0.094	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0.7	0.6	0.0419	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0	0.3	-0.3278	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0.2	0.2	0	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0.1	0.1	0	0.0588
Hottola & Siitonen 2008	Red-listed polypores (number)	0.3	0.1	0.1994	0.0588
Johansson & Gustafsson 2001	Red-listed and ind. lichens (number)	4.9	2.8	0.4565	0.0313
Johansson & Gustafsson 2001	Red-listed and ind. lichens (number)	7.6	6.8	0.1689	0.037
Junninen & Kouki 2006	Polypores (number)	4.2	2.8	0.2551	0.0123
Jönsson & Jonsson 2007	Dead wood volume	11.47	8.20	0.309	0.0588
Jönsson & Jonsson 2007	Dead wood volume	20.26	11.60	0.4208	0.1111
Jönsson & Jonsson 2007	Dead wood volume	21.25	5.60	0.6942	0.05
Jönsson & Jonsson 2007	Dead wood volume	17.52	2.00	1.1649	0.0714
Jönsson & Jonsson 2007	Dead wood volume	14.31	2.20	0.7251	0.0263
Jönsson & Jonsson 2007	Dead wood volume	14.512	7.30	0.5512	0.0238
Jönsson & Jonsson 2007	Dead wood volume	12.49	1.40	0.9747	0.0909
Jönsson & Jonsson 2007	Dead wood volume	2.29	1.50	0.1228	0.0455
Jönsson & Jonsson 2007	Dead wood volume	11.4	4.60	0.4043	0.0909
Jönsson & Jonsson 2007	Dead wood volume	10.67	9.90	0.0724	0.0263
Jönsson & Jonsson 2007	Dead wood volume	24.03	14.20	0.6374	0.0385
Jönsson & Jonsson 2007	Dead wood volume	28.35	11.10	0.8536	0.0556
Jönsson & Jonsson 2007	Dead wood volume	16.32	43.40	-1.304	0.05
Jönsson & Jonsson 2007	Dead wood volume	13.98	6.60	0.354	0.0667
Jönsson & Jonsson 2007	Dead wood volume	30.76	7.90	0.5195	0.0909
Jönsson & Jonsson 2007	Dead wood volume	51.21	20.20	0.6716	0.0526
Jönsson & Jonsson 2007	Dead wood volume	35.66	13.90	0.8928	0.0556
Jönsson & Jonsson 2007	Dead wood volume	20.52	11.60	0.3581	0.0714
Jönsson & Jonsson 2007	Dead wood volume	27.27	9.20	0.9005	0.1111

Jönsson & Jonsson 2007	Dead wood volume	20.16	5.40	0.8425	0.0625
Jönsson & Jonsson 2007	Dead wood volume	21.82	7.60	0.7353	0.027
Korvenpää et al. 2002	Bryophytes (number)	22.2	12.4	0.7159	0.0149
Korvenpää et al. 2002	Vascular plants (number)	37.9	30.8	0.3807	0.0141
Perhans et al. 2007	Bryophytes (number)	59.7	38.1	0.6614	0.027
Perhans et al. 2007	Deciduous dead wood volume	6.5	1.9	0.3359	0.027
Perhans et al. 2007	Indicator bryophytes (number)	3.8	1.1	0.6625	0.027
Perhans et al. 2007	Indicator lichens (number)	3.8	3.4	0.1226	0.027
Perhans et al. 2007	Lichens (number)	62.4	59.1	0.2371	0.027
Perhans et al. 2007	Red-listed bryophytes (number)	1	0.2	0.4982	0.027
Perhans et al. 2007	Red-listed lichens (number)	1.4	0.8	0.3528	0.027
Selonen et al. 2010	Bryophytes	4.1	2.2	0.5217	0.027
Selonen et al. 2010	Dead wood volume	7.7	4.9	0.2769	0.027
Selonen et al. 2010	Diversity of dead wood	1.2	0.8	0.4797	0.027
Selonen et al. 2010	Polypores (number)	6.3	4.6	0.2953	0.027
Selonen et al. 2010	Saproxyllic beetles	21.2	22.6	-0.0751	0.027
Siitonen et al. 2009	Dead wood volume	9.03	4.35	0.2811	0.0588
Siitonen et al. 2009	Dead wood volume	14.48	5.31	0.3629	0.0588
Siitonen et al. 2009	Dead wood volume	12.8	13.97	-0.0488	0.0588
Siitonen et al. 2009	Dead wood volume	11.47	6.98	0.2746	0.0588
Siitonen et al. 2009	Dead wood volume	9.68	4.33	0.4264	0.0588
Siitonen et al. 2009	Dead wood volume	11.22	6.81	0.2963	0.0588
Siitonen et al. 2009	Dead wood volume	12.91	3.46	0.6169	0.0588
Siitonen et al. 2009	Diversity of dead wood	4.9	5.5	-0.0823	0.0588
Siitonen et al. 2009	Diversity of dead wood	11	3.5	0.7507	0.0588
Siitonen et al. 2009	Diversity of dead wood	17.8	12.1	0.3919	0.0588
Siitonen et al. 2009	Diversity of dead wood	7.4	3.9	0.4313	0.0588
Siitonen et al. 2009	Diversity of dead wood	7.6	7.2	0.0472	0.0588
Siitonen et al. 2009	Diversity of dead wood	9	4.7	0.6003	0.0588
Siitonen et al. 2009	Diversity of dead wood	15.2	7.3	0.5967	0.0588
Siitonen et al. 2009	Large deciduous dead wood	0.6	0.6	0	0.0073
Siitonen et al. 2009	Large deciduous trees	14	7	0.192	0.0073
Sippola et al. 2005	Dead wood volume	40.9	67.2	-0.3718	0.0588

Sippola et al. 2005	Polypores (number)	29.8	34.3	-0.4995	0.0588
Sverdrup-Thygeson 2002	Diversity of dead wood	6.6	6.5	0.0326	0.0175
Sverdrup-Thygeson 2002	Indicator saproxylic beetles (number)	1	0.7	0.2171	0.0175
Sverdrup-Thygeson 2002	Red-listed beetles (number)	0.5	0.4	0.0412	0.0175
Sverdrup-Thygeson 2002	Saproxylic beetles (number)	9.67	10.6	-0.1316	0.0175

\*The effect sizes have been calculated from the test statistics derived from the original study.