

Table S1: *D. houi* and *C. funebris* intersection area statistics. “SSP1-2.6” represents the sustainable development pathway, “SSP2-4.5” represents the representative concentration pathway, “SSP5-8.5” represents and the conventional fossil fuel-dominated pathway. “2050s” represents the periods from 2041 to 2060. “2070s” represents the periods from 2061 to 2080. “Change” represents *D. houi* and *C. funebris* intersection area potential habitat suitability level (“1” indicates unsuitable habitat, “2” indicates poorly suitable habitat, “3” indicates moderately suitable habitat, “4” indicates highly suitable habitat, the number before the hyphen represents the potential habitat suitability level for *D. houi*, and the number after the hyphen represents the potential habitat suitability level for the *C. funebris*.).

Change	Current	SSP1-2.6		SSP2-4.5		SSP5-8.5	
		2050s	2070s	2050s	2070s	2050s	2070s
		Area(× 10 ⁴ km ²)	Area(× 10 ⁴ km ²)	Area(× 10 ⁴ km ²)	Area(× 10 ⁴ km ²)	Area(× 10 ⁴ km ²)	Area(× 10 ⁴ km ²)
1-1	687.41	646.61	638.79	606.55	590.64	612.42	519.38
1-2	35.68	40.19	47.08	49.69	55.54	49.21	90.88
1-3	2.51	14.56	17.32	27.29	29.30	29.19	38.60
1-4	0.0017	0.71	1.20	2.18	6.61	2.46	26.31
2-1	5.52	6.96	7.17	9.73	8.24	7.68	11.69
2-2	8.90	0.65	1.10	0.81	0.67	0.58	1.55
2-3	54.03	13.97	10.70	12.58	8.92	8.89	1.69
2-4	25.15	93.93	98.82	92.64	111.66	103.73	135.38
3-1	3.66	3.07	2.85	2.08	2.70	2.63	2.16
3-2	16.97	13.10	15.36	15.41	13.67	13.66	14.52
3-3	22.53	6.88	13.53	12.23	9.01	9.27	9.65
3-4	44.14	29.96	38.22	47.44	39.50	41.02	50.69
4-1	2.19	2.19	1.96	2.16	1.35	1.51	1.93
4-2	15.84	12.38	8.72	8.97	5.07	7.22	6.94
4-3	18.13	19.12	19.09	17.90	17.95	16.45	10.02
4-4	19.76	58.14	40.52	54.78	61.59	56.52	41.02