Supplemental Materials 2

HABITAT ASSOCIATIONS OF GOLDEN EAGLE PREY INFERRED FROM PREY

REMAINS AT NESTING SITES IN UTAH, USA

JESSI L. BROWN, GEOFFREY BEDROSIAN, AND KENT R. KELLER

Table S1. Summary of Golden Eagle prey remains identified and visits to nesting sites conducted by KRK in central Utah, USA, from 1970-2014. Data summarized here represents nests in the Central Basin and Range, Washoe and Uinta Mountains, and Colorado Plateau ecoregions only (Wyoming Basin nests excluded). The "Number of Nests" and "Proportion of Nests" referred to how many nesting sites or what proportion of the total contained remains of that species of prey, whether collected in only one year or multiple. Consult the main text for details on how species were classified into groupings such as "small_rare_birds."

ITEM	MEAN	*SD*	MEDIAN	MAX	NUMBER OF NESTS	PROPORTION OF NESTS
Nest_Visits	9.77	11.39	6	68	251	1
Blacktail_jackrabbit	63.64	98.45	22	655	206	0.82
Cottontail_sp	9.36	16.15	3	109	179	0.71
Rock_squirrel	7.03	16.08	1	165	137	0.55
Yellow_bellied_marmot	4.69	12.73	0	129	118	0.47
Black_billed_magpie	2.09	4.29	0	30	112	0.45
Dusky_grouse	1.47	4.76	0	45	52	0.21
Ring_necked_pheasant	1.35	7.92	0	105	42	0.17
Chukar	1.22	2.46	0	14	96	0.38
Gopher_snake	1.2	3.07	0	22	77	0.31
Mule_deer	1.08	3.04	0	35	69	0.27
Snowshoe_hare	1.07	4.23	0	37	34	0.14
Domestic_sheep	1.02	3.24	0	29	64	0.25
Common_raven	0.93	1.96	0	13	90	0.36
Urocitellus_squirrels	0.87	5.8	0	88	38	0.15
Pinyon_jay	0.81	2.44	0	23	60	0.24
Great_horned_owl	0.69	1.51	0	9	77	0.31
small_rare_birds	0.68	1.28	0	9	90	0.36
Long_eared_owl	0.58	1.55	0	14	62	0.25

Mallard	0.54	2.29	0	24	34	0.14
California_gull	0.49	2.13	0	22	32	0.13
Mourning_dove	0.37	1.11	0	10	44	0.18
snakes_other	0.36	1.07	0	10	44	0.18
Western_meadowlark	0.33	0.91	0	7	42	0.17
Pronghorn	0.32	1.23	0	11	29	0.12
Striped_skunk	0.26	1.26	0	14	28	0.11
Muskrat	0.24	1.17	0	10	17	0.07
White_tailed_prairie_dog	0.22	1.72	0	22	10	0.04
Short_eared_owl	0.21	1.08	0	15	25	0.10
Unidentified_duck	0.21	1.22	0	17	22	0.09
medium_rare_birds	0.18	0.51	0	4	36	0.14
Greater_sage_grouse	0.18	1.38	0	19	12	0.05
Red_fox	0.17	0.46	0	2	33	0.13
moderate_waterbirds	0.14	1.04	0	15	13	0.05
Rock_pigeon	0.14	0.91	0	11	12	0.05
Coyote	0.12	0.52	0	6	22	0.09
Long_tailed_weasel	0.12	0.38	0	2	24	0.10
Red_tailed_hawk	0.12	0.49	0	5	20	0.08
Whitetail_jackrabbit	0.11	0.9	0	10	7	0.03
small_waterbirds	0.1	0.41	0	3	16	0.06
mice_and_kangaroo_rats	0.1	0.39	0	3	20	0.08
woodrats	0.1	0.39	0	3	19	0.08
Northern_harrier	0.1	0.4	0	3	17	0.07
Double_crested_cormorant	0.09	0.69	0	9	9	0.04

Porcupine	0.09	0.73	0	11	10	0.04
Ruffed_grouse	0.09	0.59	0	6	8	0.03
gophers_voles	0.08	0.27	0	1	19	0.08
rare_sciurids	0.08	0.32	0	3	16	0.06
American_coot	0.08	0.38	0	3	13	0.05
Wild_turkey	0.08	0.43	0	5	13	0.05
domestic_mammals	0.07	0.31	0	3	14	0.06
Canada_goose	0.06	0.42	0	5	8	0.03
Gray_fox	0.06	0.28	0	2	12	0.05
domestic_birds	0.04	0.29	0	4	7	0.03
fish	0.04	0.39	0	6	4	0.02
Gadwall	0.04	0.25	0	3	8	0.03
Green_winged_teal	0.04	0.4	0	6	5	0.02
Northern_pintail	0.04	0.36	0	5	5	0.02
American_kestrel	0.03	0.2	0	2	7	0.03
Northern_shoveler	0.03	0.22	0	2	6	0.02
Prairie_falcon	0.03	0.16	0	1	7	0.03
Swainsons_hawk	0.03	0.28	0	4	5	0.02
Barn_owl	0.02	0.18	0	2	5	0.02
Burrowing_owl	0.02	0.13	0	1	4	0.02
Common_nighthawk	0.02	0.15	0	1	6	0.02
Coopers_hawk	0.02	0.14	0	1	5	0.02
Ferruginous_hawk	0.02	0.17	0	2	4	0.02
Great_blue_heron	0.02	0.2	0	3	2	0.01
Kit_fox	0.02	0.14	0	1	5	0.02

Raccoon	0.02	0.13	0	1	4	0.02
Sharp_shinned_hawk	0.02	0.15	0	1	6	0.02
Unidentified_grouse	0.02	0.15	0	2	3	0.01
American_badger	0.01	0.11	0	1	3	0.01
American_white_pelican	0.01	0.09	0	1	2	0.01
Blue_winged_teal	0.01	0.11	0	1	3	0.01
California_quail	0.01	0.09	0	1	2	0.01
Cinnamon_teal	0.01	0.09	0	1	2	0.01
Rocky_Mtn_elk	0.01	0.09	0	1	2	0.01
American_mink	0	0.06	0	1	1	0.00
Common_loon	0	0.06	0	1	1	0.00
Flammulated_owl	0	0.06	0	1	1	0.00
Northern_goshawk	0	0.06	0	1	1	0.00
Northern_pygmy_owl	0	0.06	0	1	1	0.00
Northern_saw_whet_owl	0	0.06	0	1	1	0.00
Osprey	0	0.06	0	1	1	0.00
Peregrine_falcon	0	0.06	0	1	1	0.00
Ringtail_cat	0	0.06	0	1	1	0.00
Sandhill_crane	0	0.06	0	1	1	0.00
White_winged_scoter	0	0.06	0	1	1	0.00

Figure S1. Predicted number of black-tailed jackrabbits within prey remains for Golden Eagle nesting sites in Utah, USA. Estimates are means ± 95% CI from top Poisson model with other parameters held at their mean value.
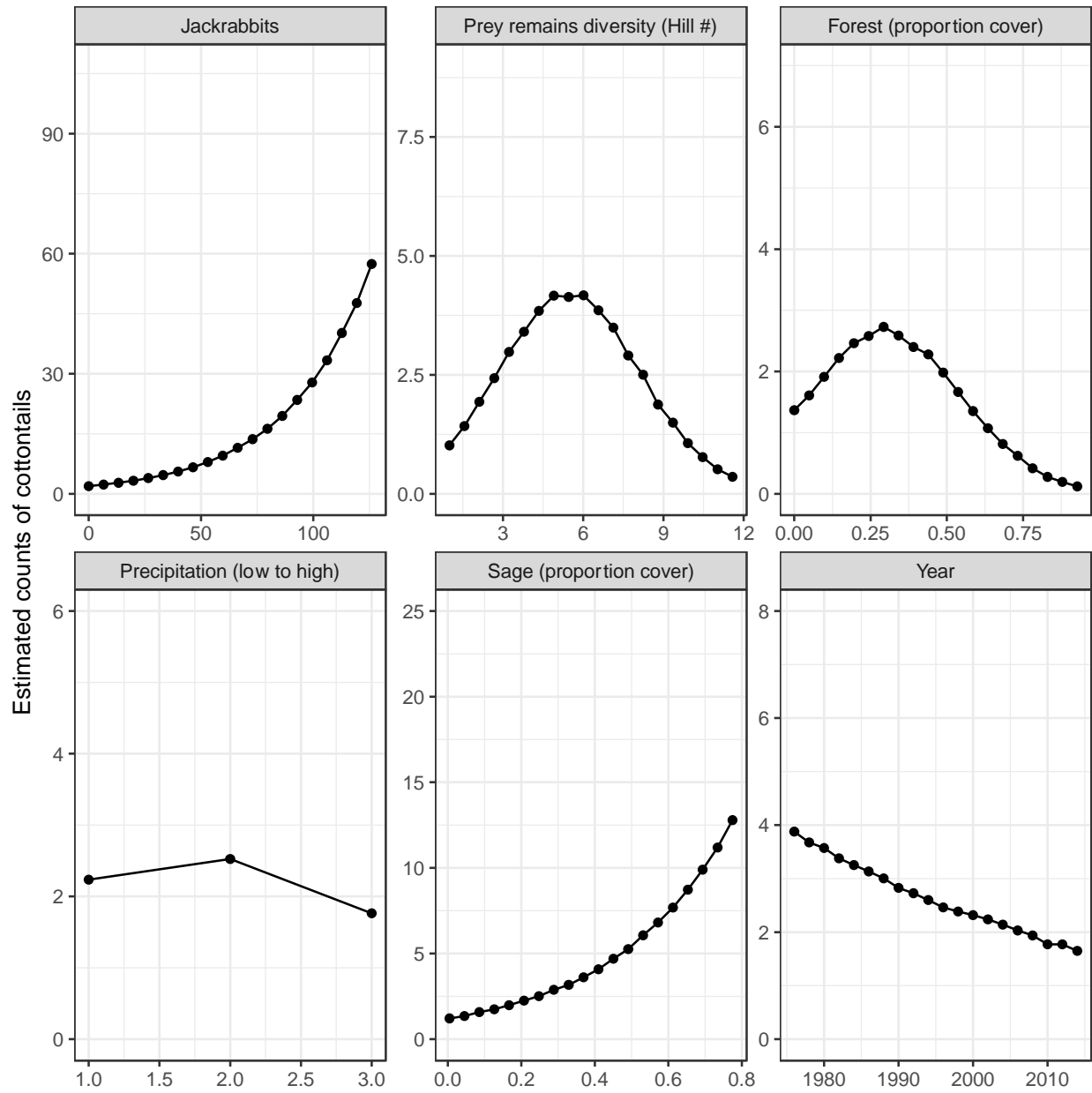
Figure S2. Predicted number of cottontails (all species) within prey remains for Golden Eagle nesting sites in Utah, USA. Estimates are means ± 95% CI from top Poisson model with other parameters held at their mean value. Note varying y-axis scales.
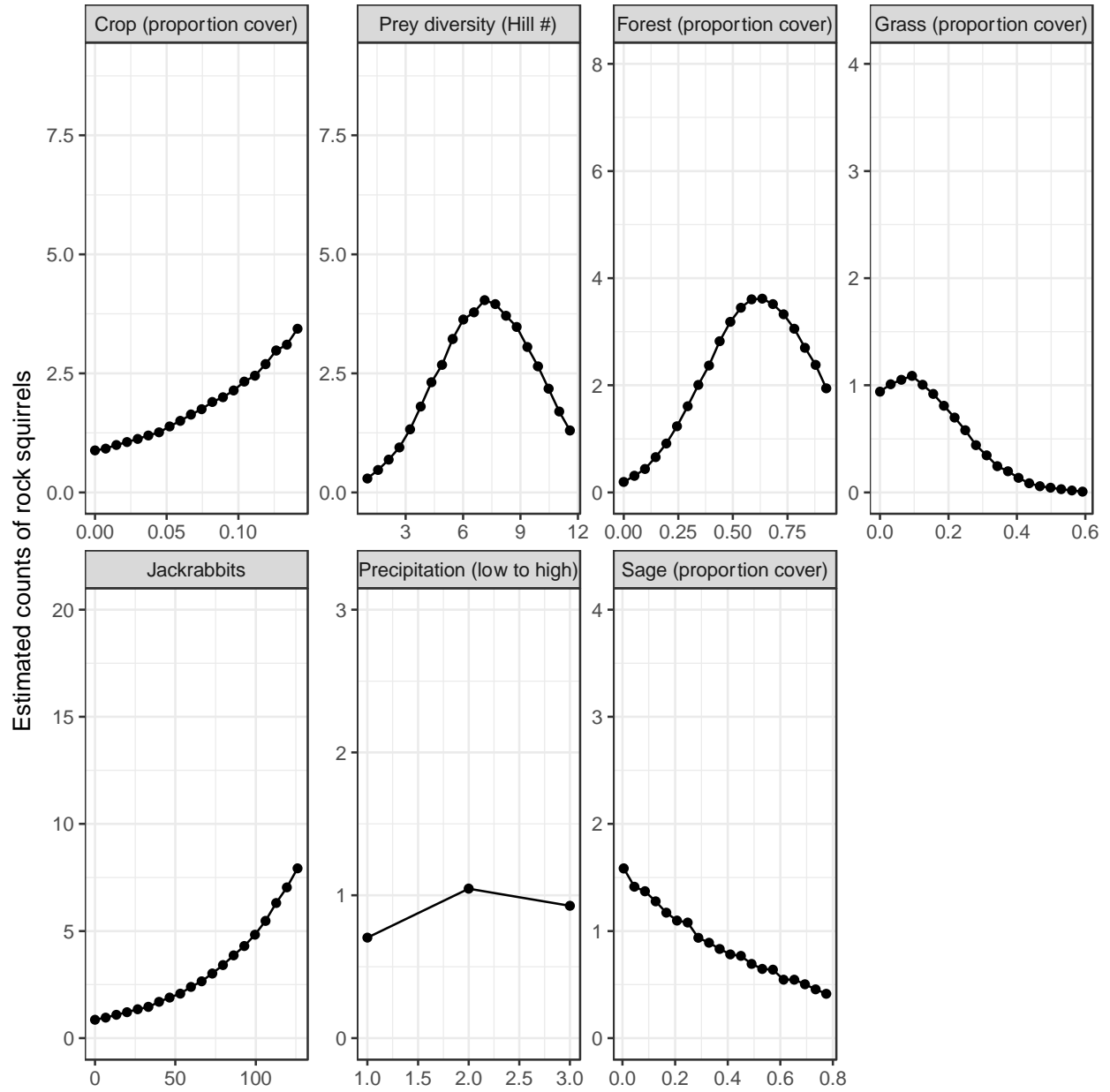
Figure S3. Predicted number of rock squirrels within prey remains for Golden Eagle nesting sites in Utah, USA. Estimates are means ± 95% CI from top Poisson model with other parameters held at their mean value. Note varying y-axis scales.
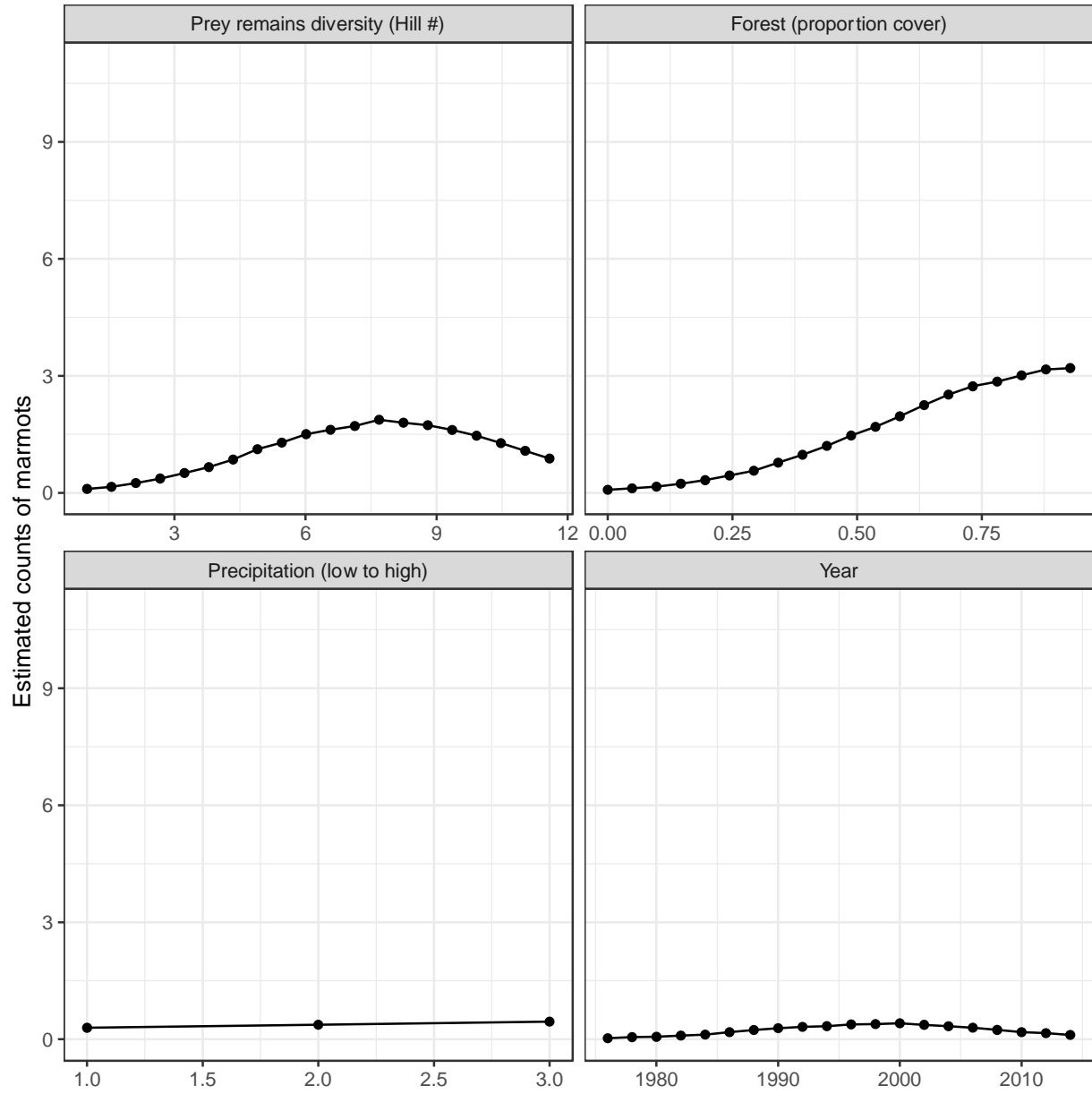
Figure S4. Predicted number of yellow-bellied marmots within prey remains for Golden Eagle nesting sites in Utah, USA. Estimates are means ± 95% CI from top Poisson model with other parameters held at their mean value.
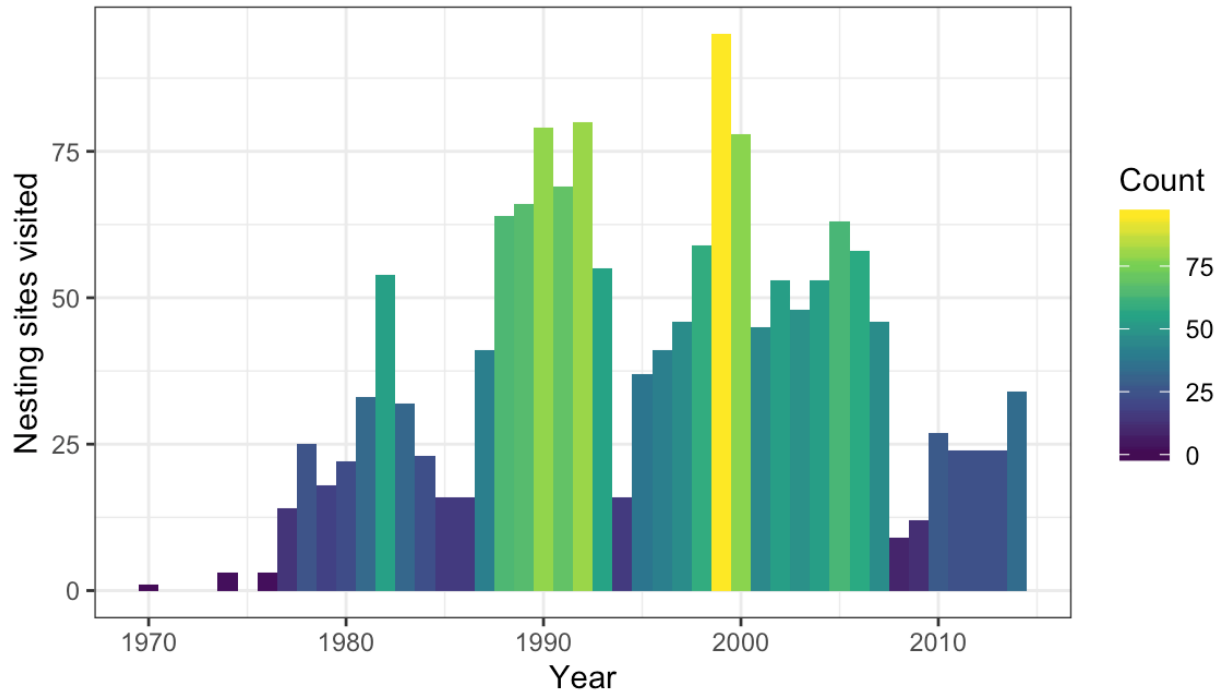
Figure S5. Number of Golden Eagle nesting sites in Utah, USA, visited by year.