Supporting Information

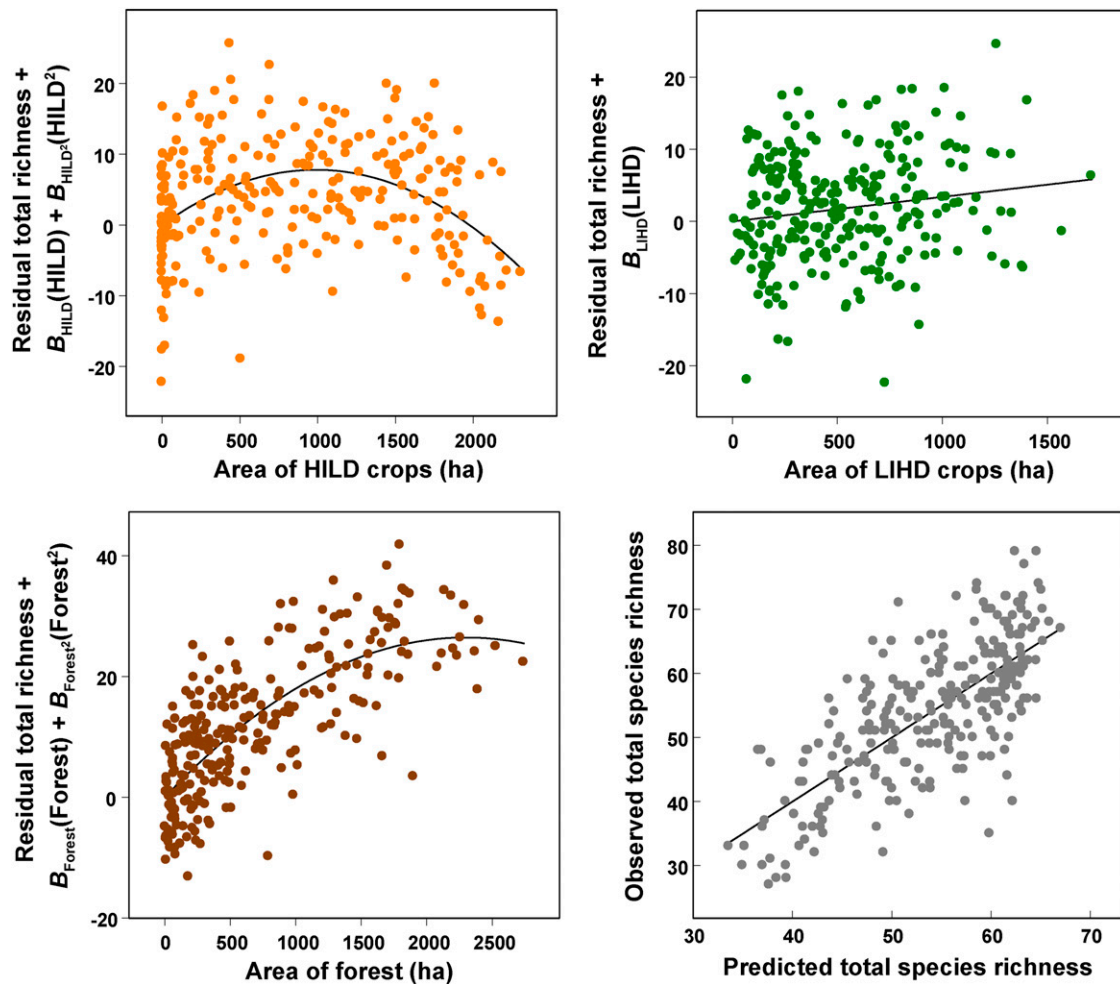## Meehan et al. 10.1073/pnas.1008475107

Fig. S1. Partial residual plots for the effects of HILD, LIHD, and forest habitat on total bird species richness. Regression lines illustrate parameter values in Table 1. (*Lower Right*) Whole-model fit, where the line represents unity.

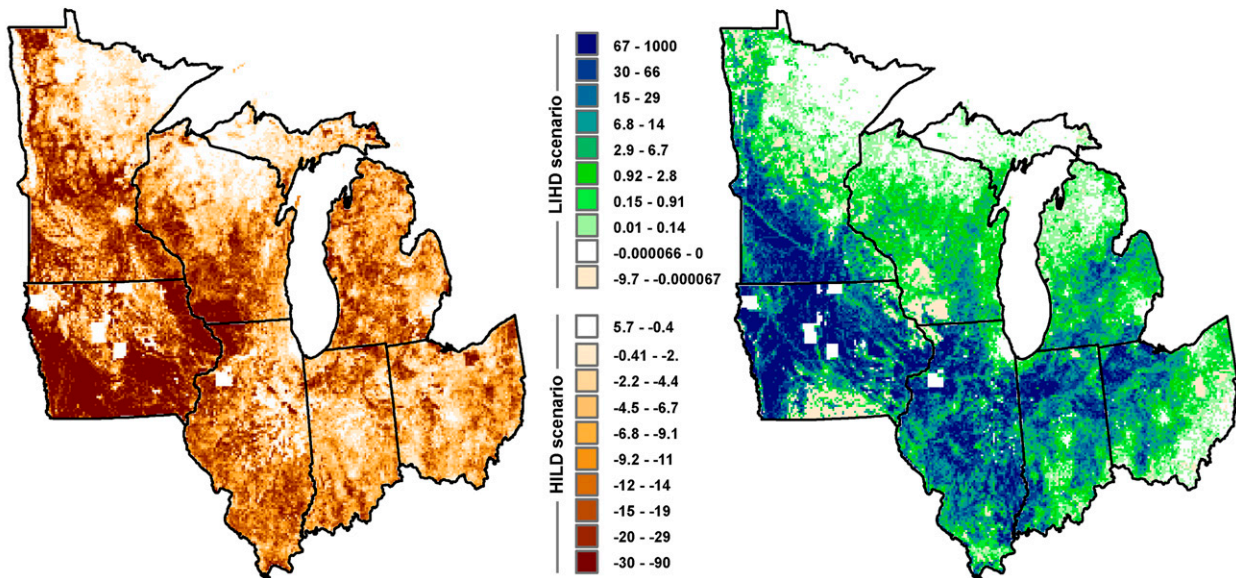Change in SCC richness (%) under HILD scenario   Change in SCC richness (%) under LIHD scenario

Fig. S2. Percent changes in the number of species of conservation concern predicted for 25-km^2 landscape blocks by an empirical land cover model (Table 1 and Fig. 1) under divergent bioenergy scenarios. In the HILD scenario (*Left*), 9.5 million ha of marginal land that currently contain LIHD habitats were converted to HILD bioenergy crops. In the LIHD scenario (*Right*), 8.3 million ha of marginal land that currently contain HILD crops were converted to LIHD habitats. Each color shade corresponds with 10% of the distribution of percent change values.

Table S1.   Competing models, ranked by ΔAIC_c, for total bird-species richness as a function of land cover

Model	ΔAIC_c	Akaike model weight
1. $H + H^2 + F + F^2 + L$	0.00	0.06
2. $H + H^2 + F + F^2 + L + W$	0.48	0.05
3. $H + H^2 + F + F^2$	0.79	0.04
4. $H + H^2 + F + F^2 + L + W + W^2$	0.87	0.04
5. $H + H^2 + F + F^2 + U + U^2$	0.96	0.04
6. $H + H^2 + F + F^2 + L + U + U^2$	1.10	0.03
7. $H + H^2 + F + F^2 + L + U$	1.85	0.02
8. $H + H^2 + F + F^2 + L + L^2$	1.95	0.02

H, high-input low-diversity bioenergy crops such as corn and soybeans; L, low-input high-diversity habitats such as pastures, hay fields, and grasslands; F, forest; W, herbaceous wetlands; and U, urban areas with ≥50% impervious surface.