**Supplementary Figure 1** Plots show the marginal likelihood of the model (A) and $\Delta K$ (B) for different assumed numbers of clusters. Mean values plus and minus one standard error are depicted for the former. Calculations of $\Delta K$ follow Evanno *et al.* (2005).

A. Estimate of $K$ based on $L(K)$

![Plot A](image1)

B. Estimate of $K$ based on $\Delta K$

![Plot B](image2)
Supplementary Figure 2  Boxplots depicting variation in wing pattern PC1 and PC2 scores for *Lycaeides* by species and sex. Wing pattern differences between species are greater for males than females.
Supplementary Figure 3  Distribution of admixture proportions (A), fuzzy cluster membership based on male genitalia (B), and fuzzy cluster membership based on male wing pattern (C) for individuals from the core of the Rocky Mountain hybrid zone. Admixture proportions were estimated using structure with $k = 2$. The distributions of admixture proportion and fuzzy cluster memberships were not different from unimodal. See the main text for more details.
Supplementary Figure 4  Scatterplot of geographic location by LD. Points show LD estimates for individual pairs of markers.