$$[\boldsymbol{\beta}, \mathbf{z}, p | \mathbf{y}] \propto$$

$$\prod_{i=1}^{N} \operatorname{binomial}(y_{i} | p \cdot z_{i}, n_{i}) \times$$

$$\operatorname{Bernoulli}(z_{i} | \operatorname{invlogit}(\beta_{0} + \beta_{1} e l e v_{i} + \beta_{2} e l e v_{i}^{2} + \beta_{3} f o r e s t_{i})) \times$$

$$\operatorname{normal}(\beta_{0} | 0, 2.25) \operatorname{normal}(\beta_{1} | 0, 2.25) \times$$

$$\operatorname{normal}(\beta_{2} | 0, 2.25) \operatorname{normal}(\beta_{3} | 0, 2.25) \operatorname{beta}(p | 1, 1)$$