

# Tree Frog Example

$\mathbf{x}_1$  = vector of observations of stream size

$\mathbf{x}_2$  = vector of observations of palms (0=absent,1=present)

$\mathbf{y}^{visual}$  = vector of number of observations at each site by eye

$\mathbf{y}^{auditory}$  = vector of number of observations at each site by ear

$\mathbf{n}^{visual}$  = vector of number of visual surveys

$\mathbf{n}^{auditory}$  = vector of number of auditory surveys

$z_i$  = the true state of patch  $i$ .  $z_i = 1$  if occupied and 0 if not occupied