

Figure 1. Distribution of survey locations for the three groups of surveys referenced in this report. Redwood = 1160 locations from surveys conducted by Green Diamond, PALCO, and HSU, RSL = 364 locations surveyed by Redwood Sciences Lab, 1999 = the 682 locations analyzed in the model of Carroll et al. (1999).

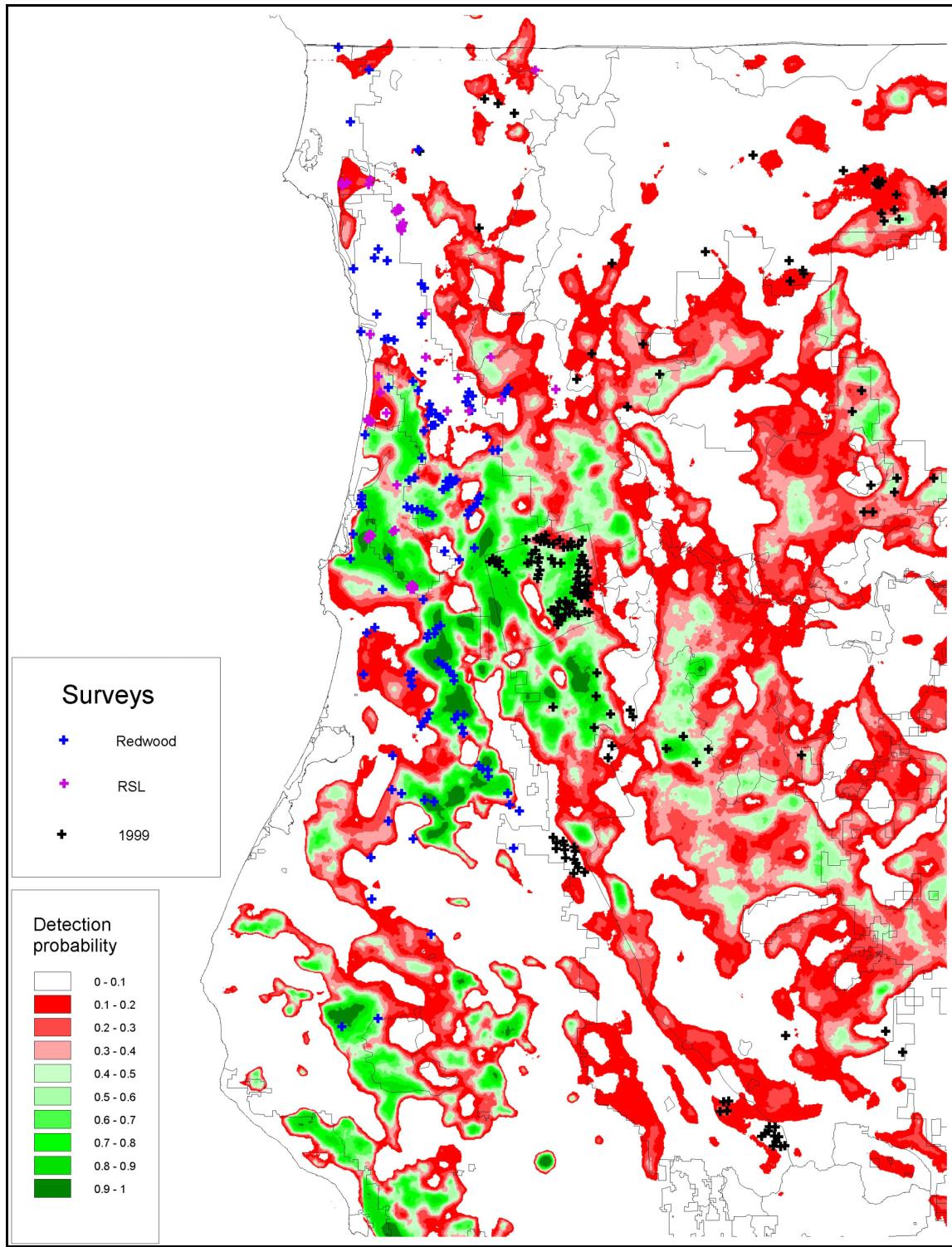


Figure 2. Distribution of fisher detections from the three groups of surveys referenced in this report and shown in Figure 1.

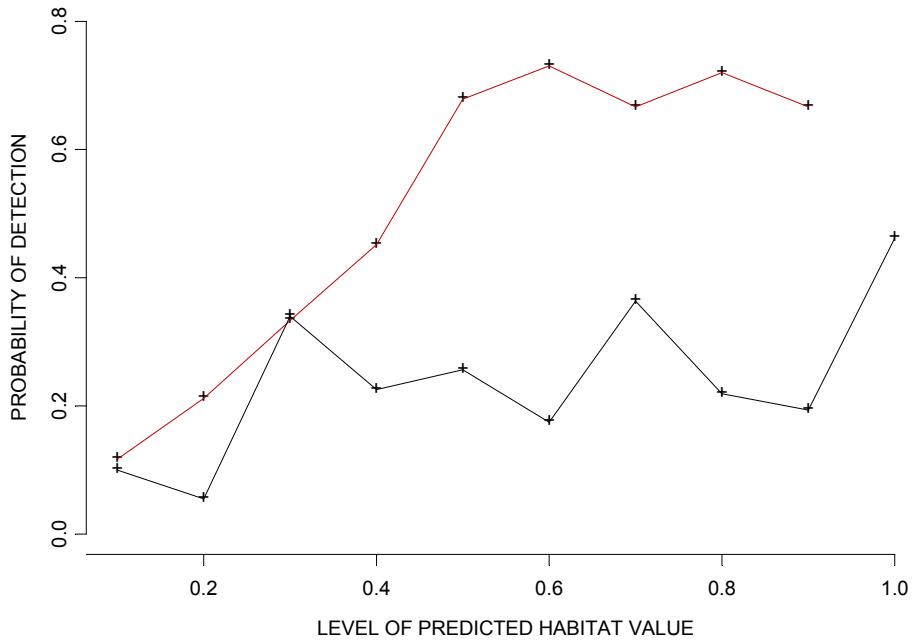


Figure 3. Plot of predicted probability values from the 1999 model at survey locations, divided into ten equal-sized bins plotted against observed fisher detection rate within these binned groups. The red line represents results from the 1999 data set ( $n=682$ ), while the black line represents results from the redwood zone data set ( $n=1160$ ).

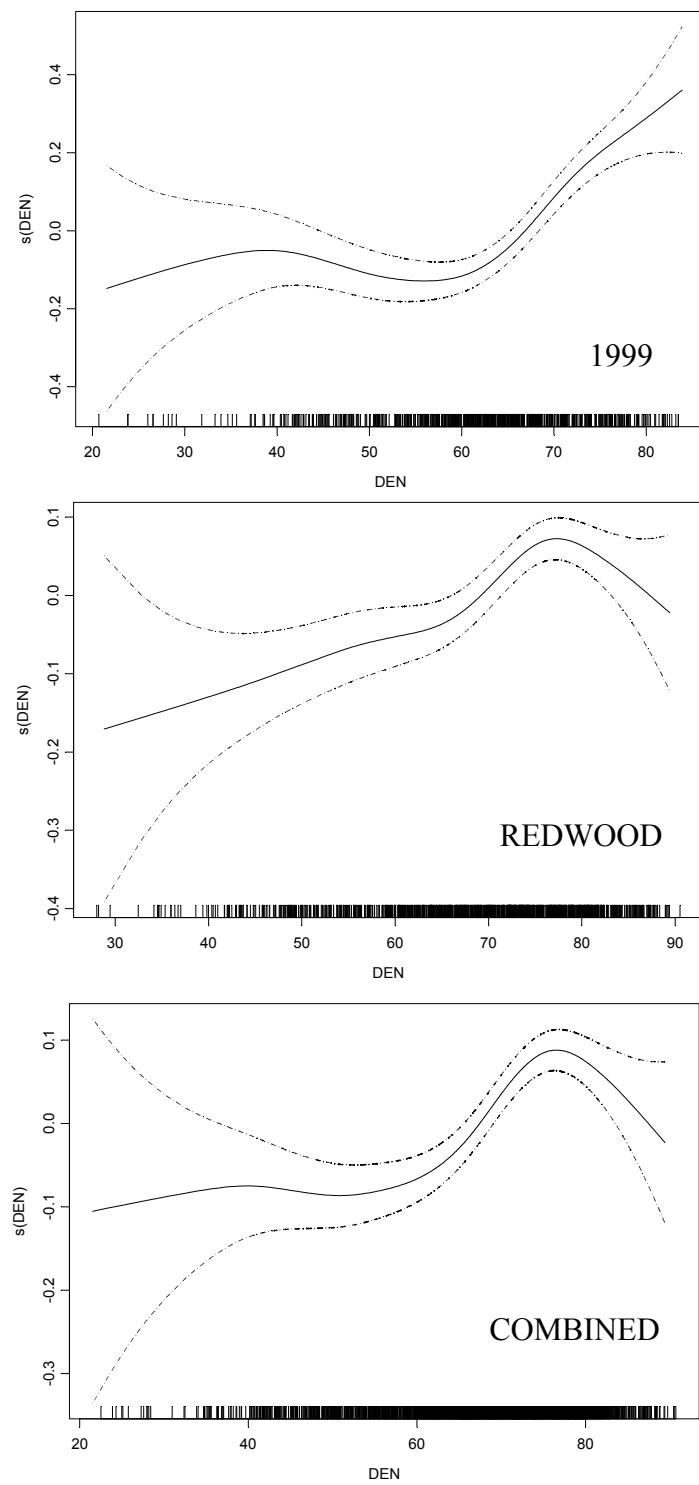


Figure 4. Generalized additive modeling (GAM) plots of the univariate relationship between density (canopy closure) and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

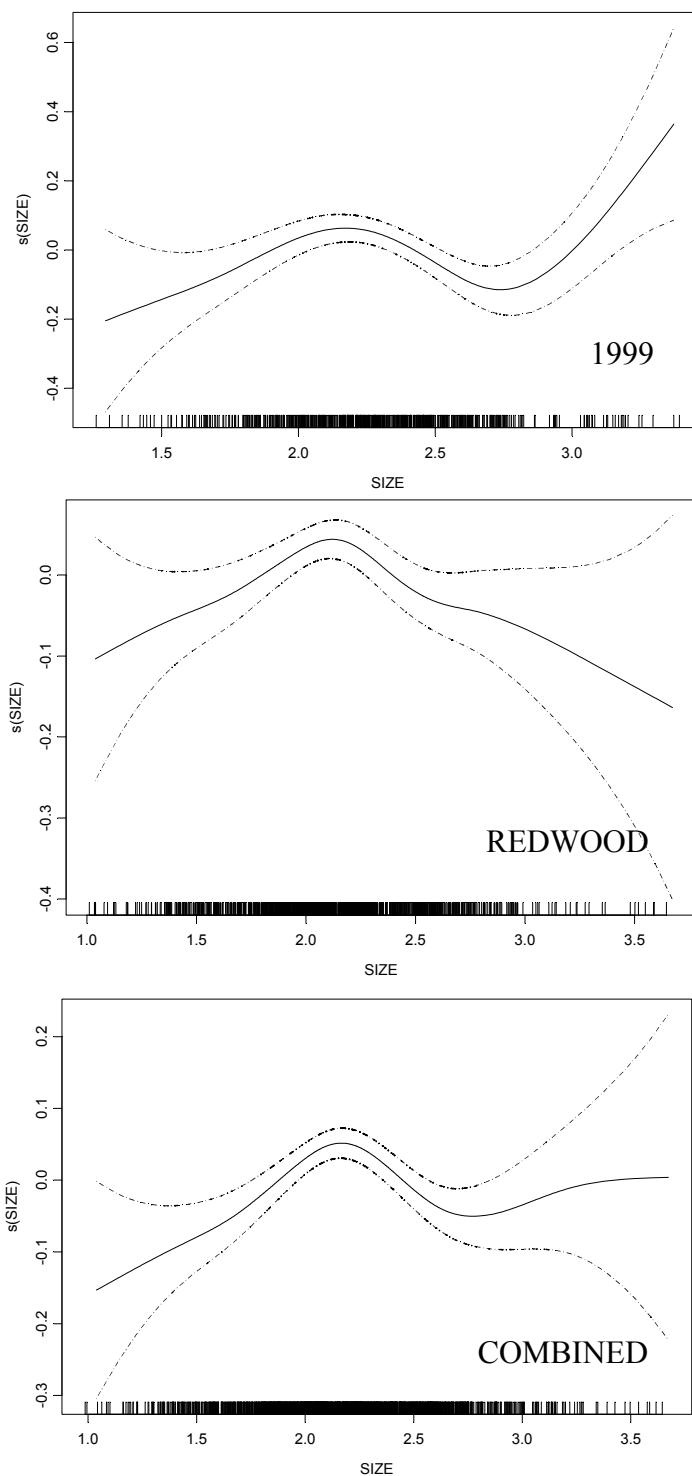


Figure 5. Generalized additive modeling (GAM) plots of the univariate relationship between tree size class and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

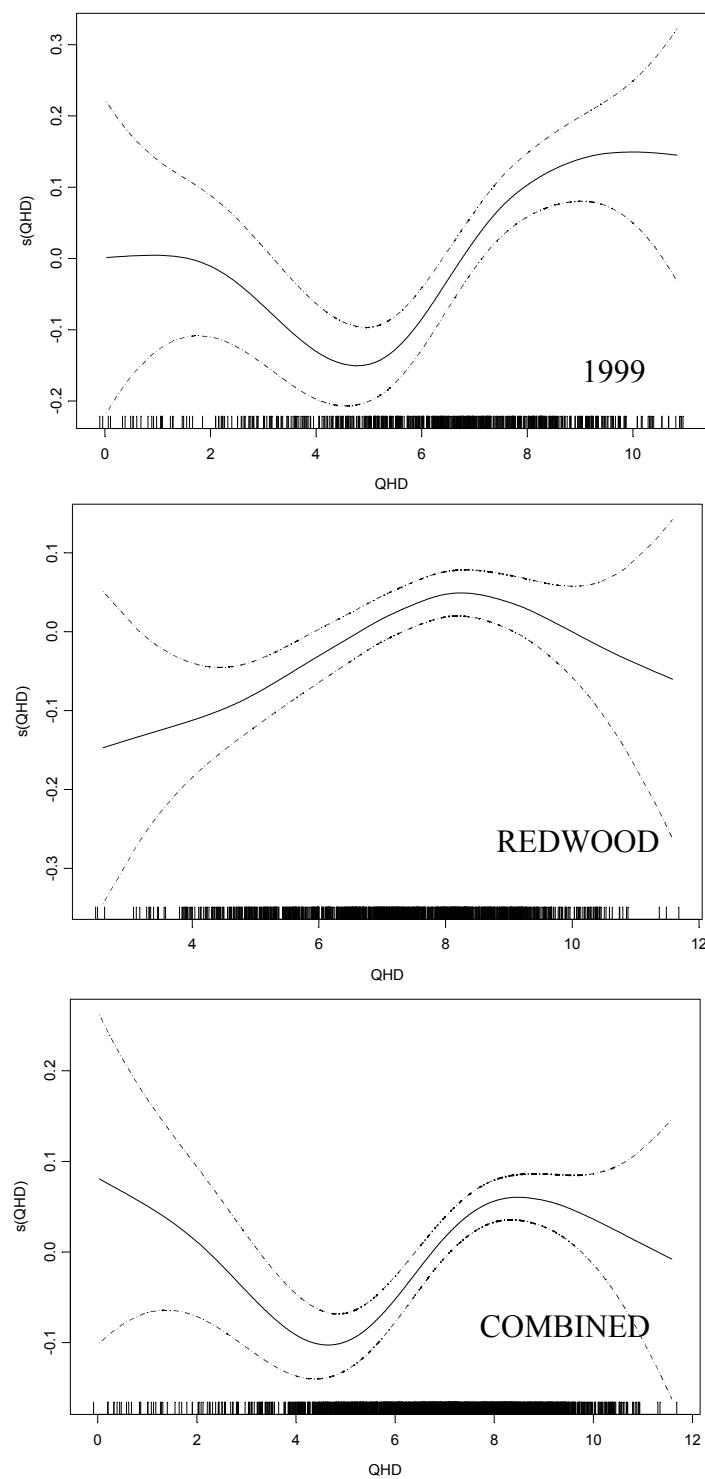


Figure 6. Generalized additive modeling (GAM) plots of the univariate relationship between hardwood QMDBH and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

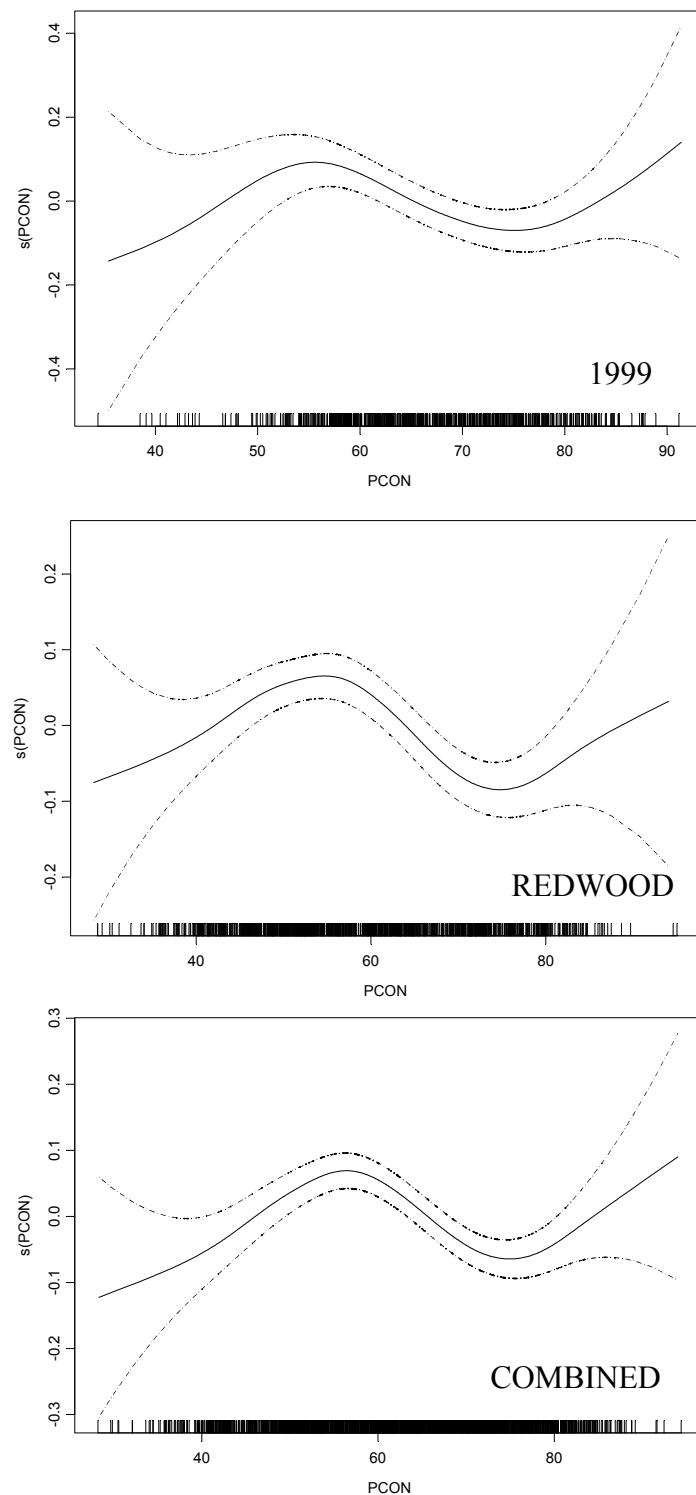


Figure 7. Generalized additive modeling (GAM) plots of the univariate relationship between percent conifer and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

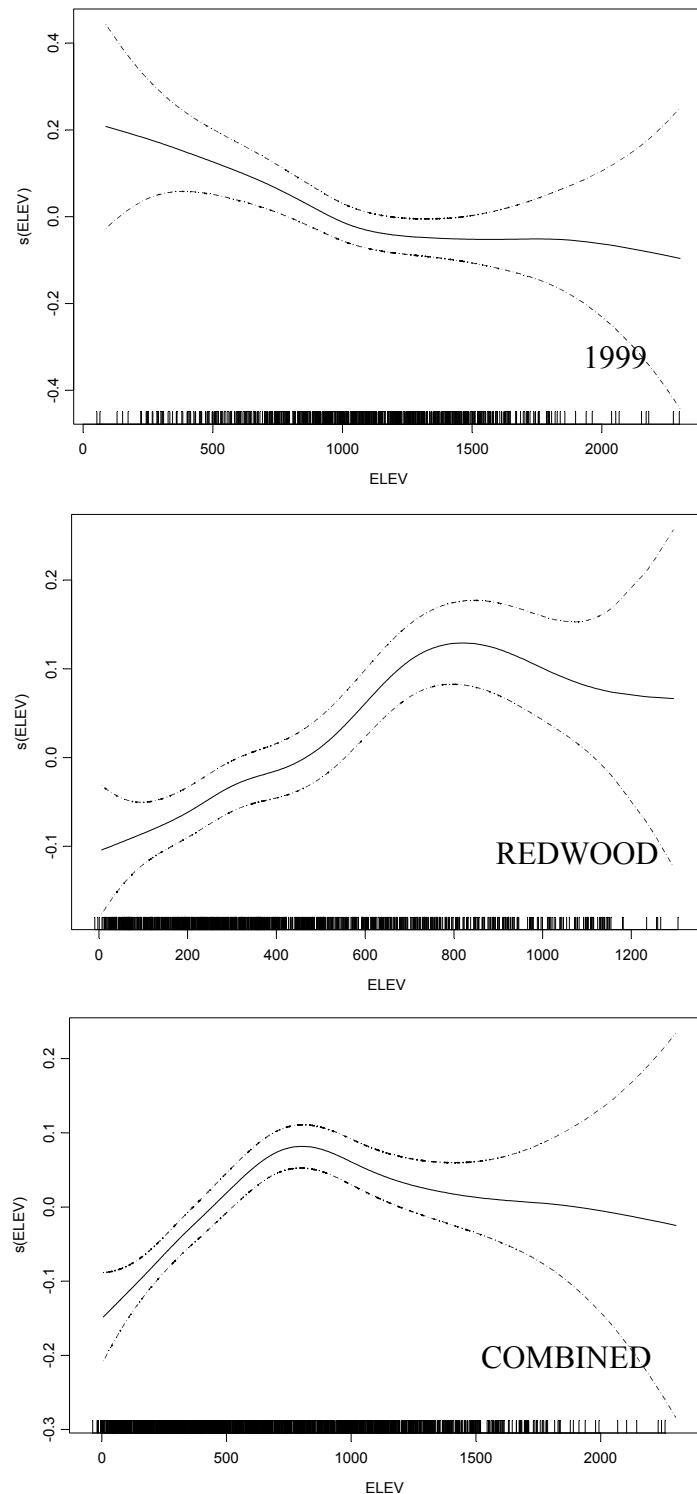


Figure 8. Generalized additive modeling (GAM) plots of the univariate relationship between elevation and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

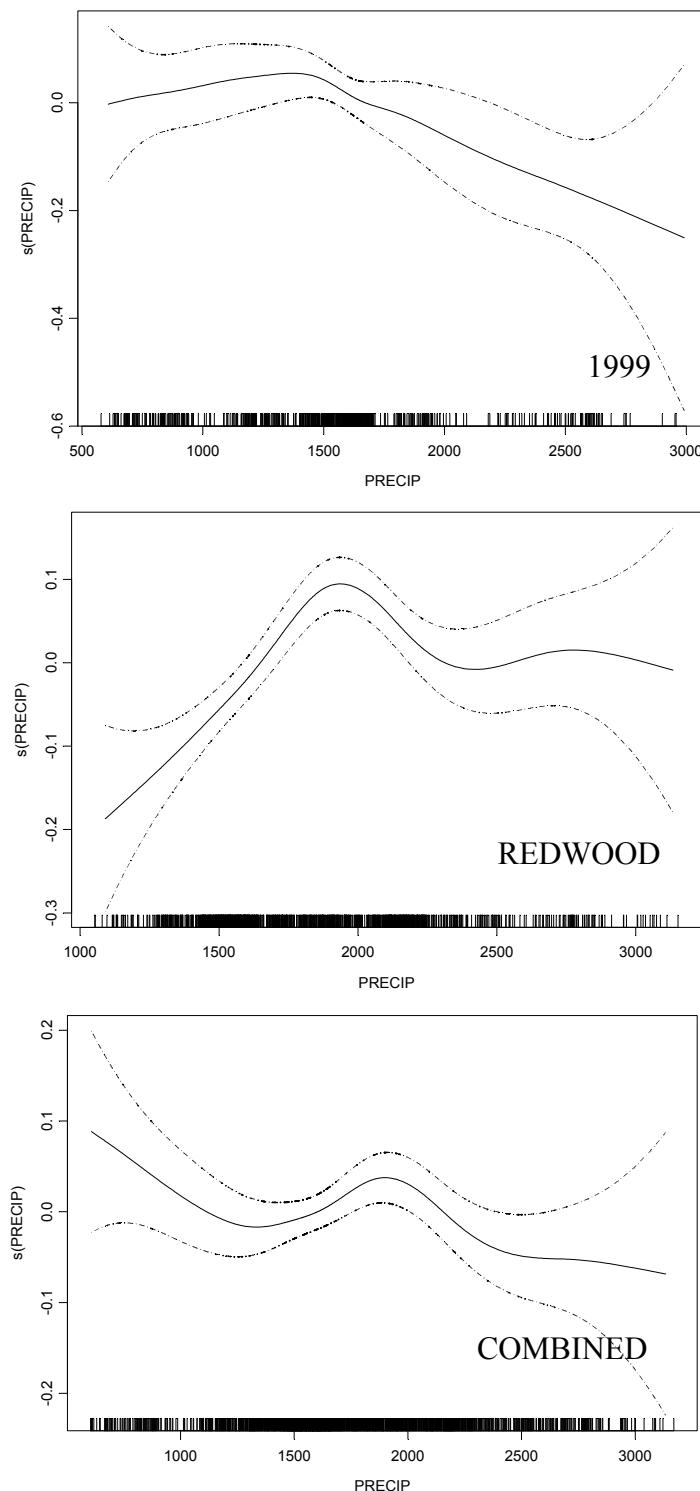


Figure 9. Generalized additive modeling (GAM) plots of the univariate relationship between precipitation and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

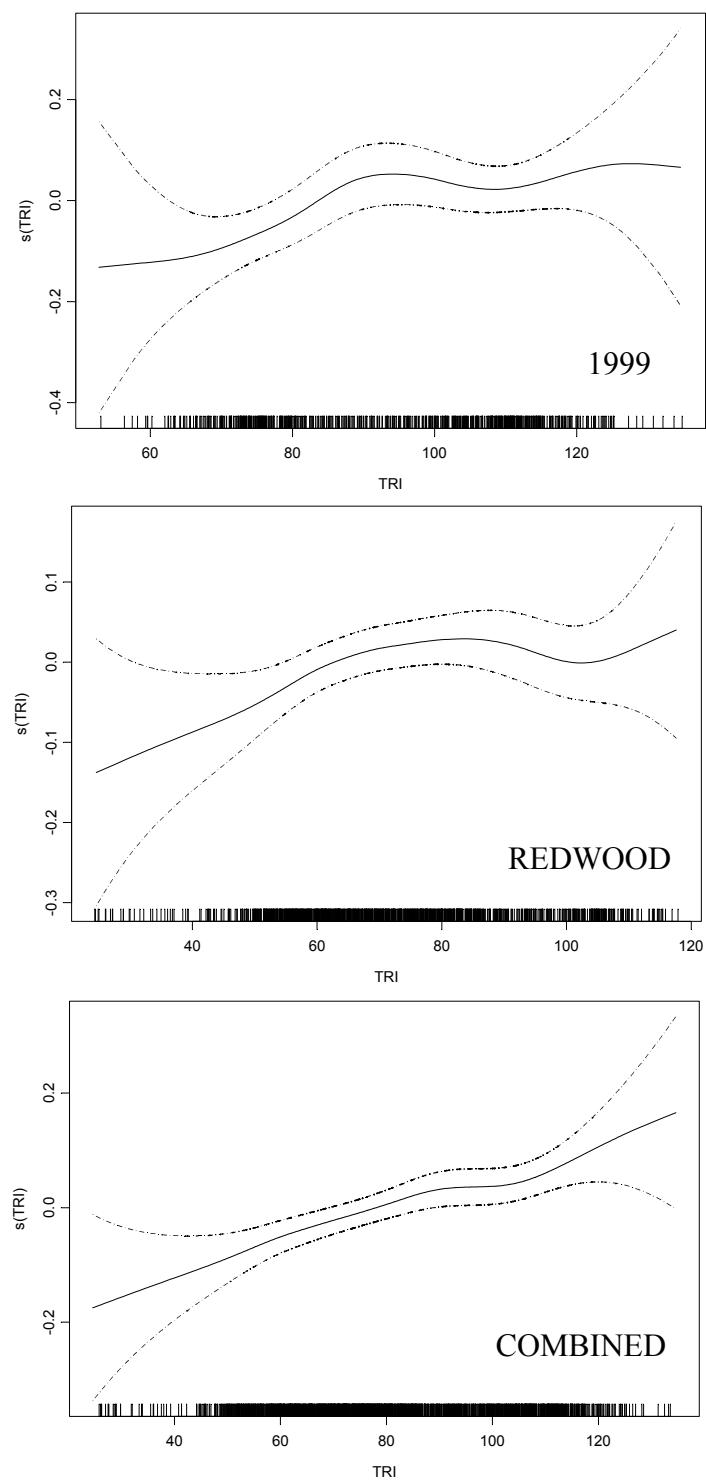


Figure 10. Generalized additive modeling (GAM) plots of the univariate relationship between terrain ruggedness (TRI) and fisher detection probability for (a) the 1999 data set ( $n=682$ ), (b) the redwood zone data set ( $n=1160$ ), and the combined 1999 and redwood zone data set ( $n=1842$ ).

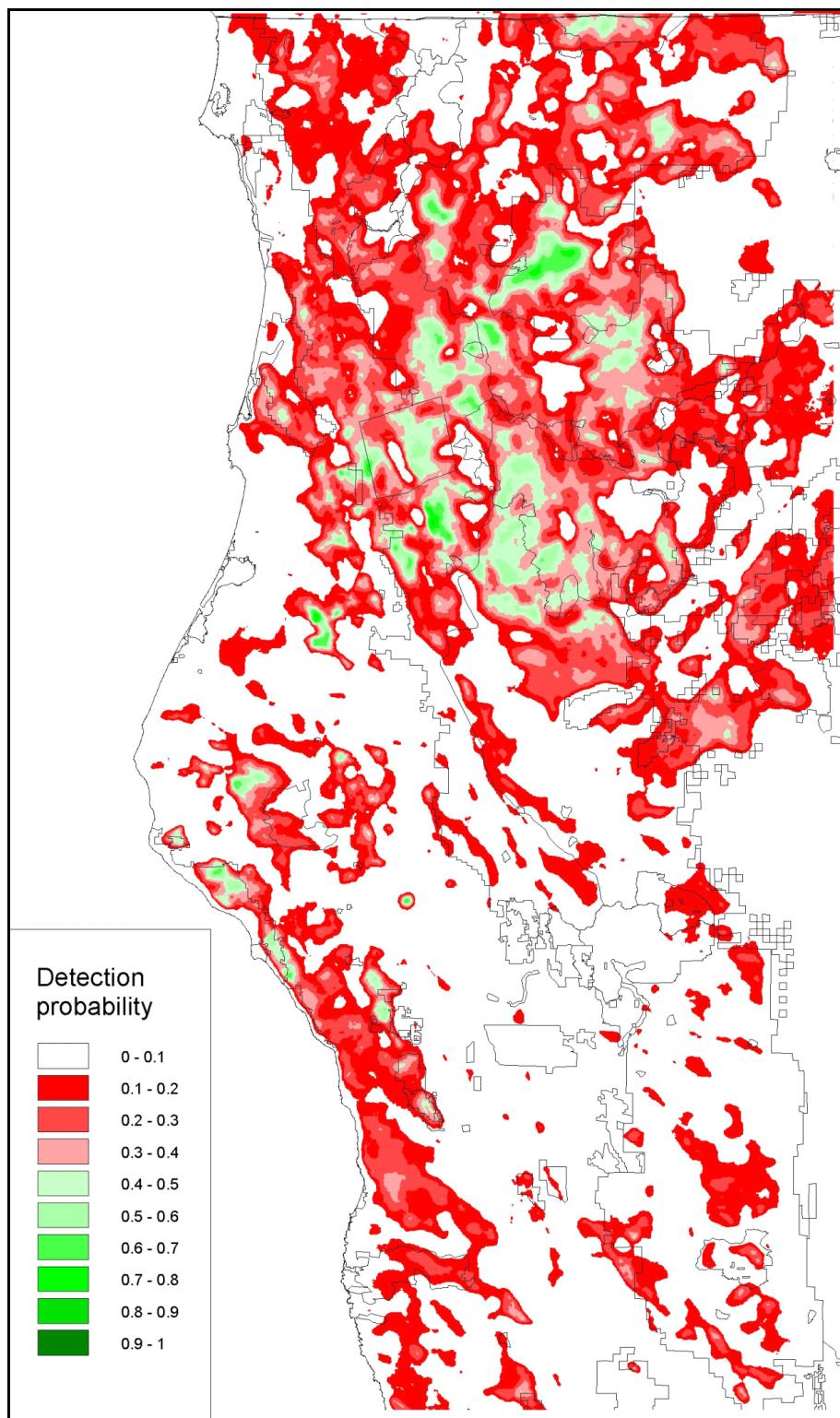


Figure 11. Probability of fisher detection as predicted by a model built from the combined 1999 and redwood zone data set (Model 2: Table 3), with a model structure similar to that of the 1999 model but excluding the trend surface variable (UTM northing) and adding terrain ruggedness (TRI).

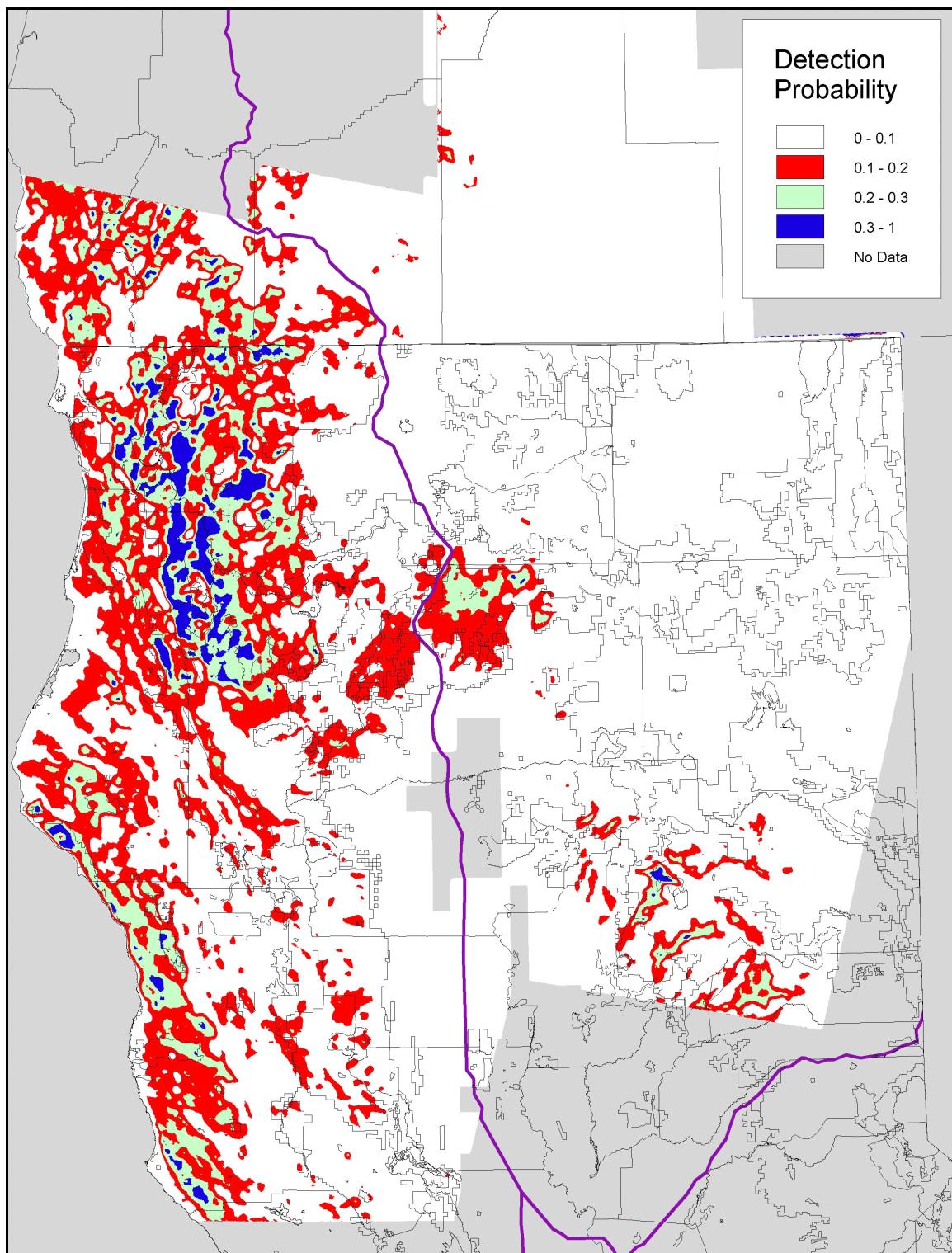


Figure 12. Probability of fisher detection for northwestern California and the northern Sierra Nevada as predicted by a model built from the combined 1999 and redwood zone data set (Model 3b), with a model structure incorporating only density (in the form of WHR closure class) and terrain ruggedness (TRI).

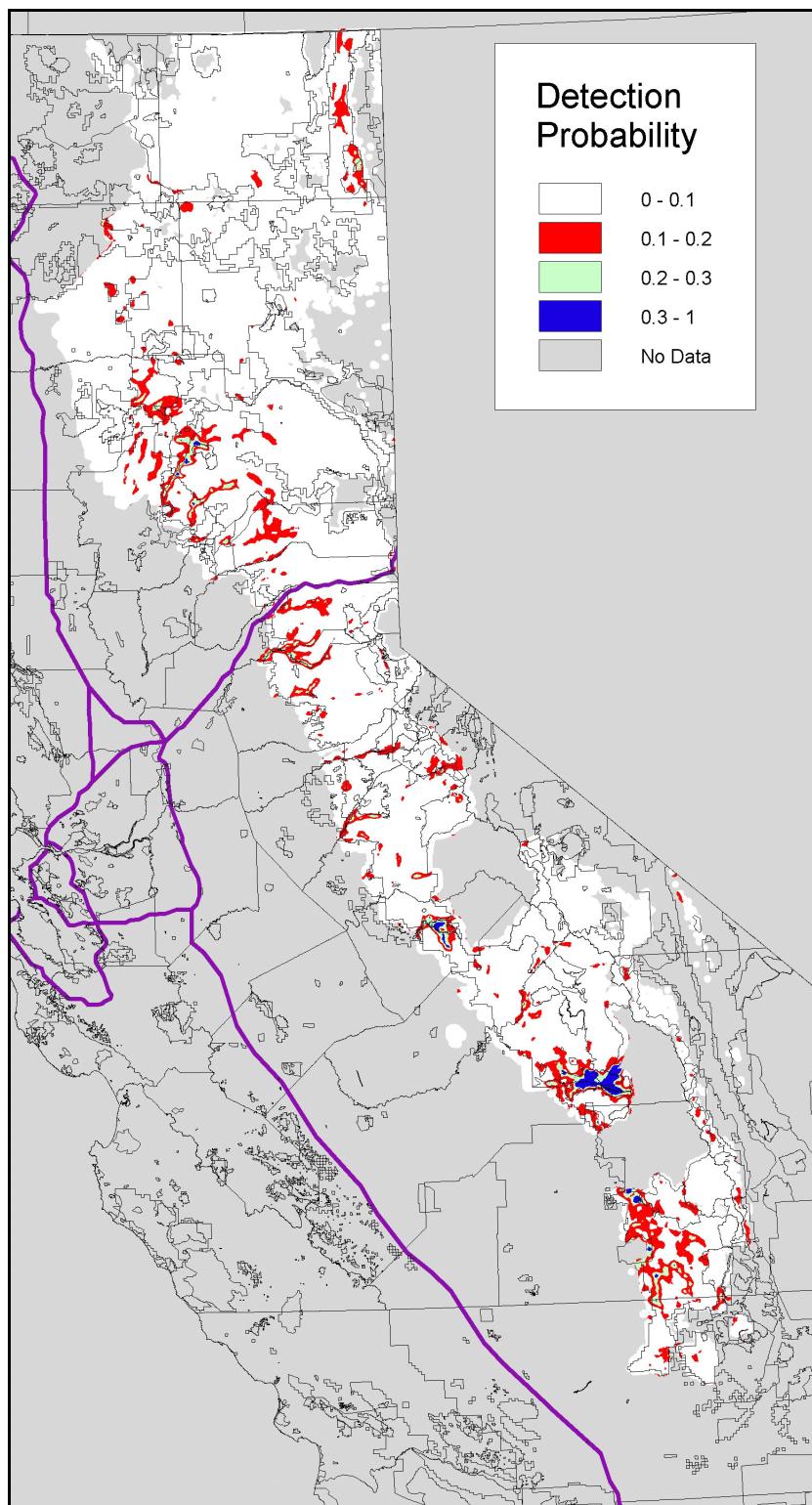


Figure 13. Probability of fisher detection for USFS lands in the Sierra Nevada as predicted by a model built from the combined 1999 and redwood zone data set (Model 3b), with a model structure incorporating only density and terrain ruggedness (TRI).