

Species Distribution Modeling of *Monotropa uniflora* (Indian pipe) using MaxEnt on Green Diamond Resource Company Property

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Since 2001, Green Diamond Resource Company (GDRCo) has been conducting pre-disturbance floristic surveys of Timber Harvest Plans. *Monotropa uniflora* (Indian pipe) is a listed plant with a California Rare Plant Rank of 2B.2 that has been frequently detected in the northernmost regions of the California ownership. Over the course of many years, GDRCo has collected and maintained detailed data regarding the locations and quality of these Indian pipe populations. In an effort to better understand the distribution of Indian pipe across the landscape, a habitat suitability model was created using MaxEnt. The model was created using botanical data from both GDRCo and data for Indian pipe available from the California Natural Diversity Database (CNDDDB). In addition, detailed landscape scale climatological, topographical, and physical spatial data were used for prediction. Some of the most significant contributing variables include precipitation, growing degree days, taxonomic soil order and elevation. The Smith River region of GDRCo's ownership has the most area with the highest habitat suitability indices. The model will assist in future monitoring efforts and assessment of Indian pipe's status.