## The Rare Plant Treasure Hunt and the Plant Phylogeny Working Group: A collaborative effort between the California Native Plant Society and the UC and Jepson Herbaria May 2015

The California Native Plant Society (CNPS) and the UC and Jepson Herbaria (UC/JEPS) have partnered on a project to promote botanical specimen collecting and subsequent vouchering in California herbaria. The Rare Plant Treasure Hunt (RPTH) has been an ongoing citizen-science project of CNPS since 2010. In this program, volunteer botanists and botany enthusiasts search for, document, and report back on rare plant occurrences. All data that are gathered are reported to the California Natural Diversity Database, and can be shared directly with land managers also. Field work is conducted in both volunteer- and staffled trips, but someone with plant ID experience is present on every trip. Data gathered through this effort have been extremely helpful in assessing threats, updating Rare Plant Ranks, and assuring that land managers have updated rare plant data. Our efforts to increase specimen vouchering in this project are aimed at increasing the robustness of our surveys (by allowing other botanists to review specimens), and contributing to the broader scientific community by making specimens available for future research. The majority of newly-described taxa are discovered as herbarium material, further highlighting the need for ongoing collecting.

The collaboration between CNPS and UC/JEPS is a perfect example of one of the research uses of these specimens. In addition to collections made on rare plant surveys, we are also targeting some taxa that are needed by UC/JEPS as part of a statewide phylogenetic study of the California flora. This study will help to re-draw the conservation map for California, by identifying un-protected areas with unique evolutionary histories. While many of the plants needed for this study are rare, some common plant specimens are also needed.

CNPS staff and volunteers maintain a strict adherence to ethical plant collecting, so that we are avoiding any harm to populations, as well as following all existing rules and regulations. Our methods are outlined in the attached "Draft Terms and Conditions" document. Additionally, we will only collect State- or Federally-listed taxa when the appropriate permits from the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service have been obtained.