Key for the Five Piñon-Juniper types (for further information, contact Kent Reid at NMFWRI)

These five P-J types have been identified by a working group, convened by NM State Forestry, whose job is to develop a Piñon-Juniper Management Framework consistent with NM Ecological Restoration Principles. Their draft documentation includes the dichotomous key from Romme et al. 2007, which does not match the working group's five PJ types. The NRCS in New Mexico has its own key to PJ types, which is less concerned with naming the PJ type than with deciding how to manage it. The key presented here draws from both the Romme and NRCS keys, but its primary concern is differentiating the types identified by the working group. It does that by using information on soil factors, rainfall patterns, and the existing plant community from the draft descriptions of the five types.

Any type as elastic and as diverse as "P-J" defies easy categorization, which is what this key attempts to do. In particular, the differences between Savanna and Grassland, and among Persistent, Shrub, and Open Woodlands, are subject to nuance and gradations that are not easily captured in a dichotomous key. Note that tree height and canopy cover are so variable that they are not used here as diagnostic factors. Despite these difficulties, a land manager should be able to use this key in conjunction with the five descriptions to make informed decisions about actions toward restoration, desired conditions, and land health.

1a.   Deep soils (>14 inches deep), surface generally free of large rock fragments or large amounts of gravel, and capable of producing continuous fine fuels under normal precipitation -   **2**
1b.   Shallow or transitional soils, surface may be eroded and often is rocky or droughty, and usually not capable of producing continuous fine fuels under normal precipitation –   **3**

2a.   Most precipitation falls during summer. The oldest trees (possibly >150 years) are older and usually taller than those found in Grasslands –   **PJ Savanna or Juniper Savanna**
2b.   Season of greatest precipitation can vary. Old trees are very rare and found on microsites that historically would have allowed escape from fire –   **Grassland**

3a.   Generally on shallow, coarse-textured soils. Most precipitation falls during winter. Piñon and juniper are the dominant species –   **PJ Persistent Woodland**
3b.   Soil transitional between deep Savanna soils and shallow Persistent Woodland soils –   **4**

4a.   Bi-modal precipitation pattern. Uneven-aged stands on rolling uplands with persistent, taller trees. Probably common historically, but rare under current conditions –   **PJ Open Woodland**
4b.   Most precipitation falls during winter. Sagebrush or oak co-dominate with the P-J, but the shrub species may be crowded out under current conditions. This type often found in small patches that can be difficult to map on a statewide scale –   **PJ Shrub Woodland**