

Guidelines to Rangemap for *Larrea tridentata*

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Target Accuracy

The target accuracy for this map is <5 km. But, because the specific range is not only poorly known, but also discontinuous and of variable density, this map may exclude some satellite populations and merge some discontinuous clusters. The accuracy is better in well documented portions of the range such as the Mojave Desert, but lower in other areas such as Mexico. This map is intended to provide a digitized coverage suitable for use in GIS while combining all of the available data to create the most complete coverage possible using publicly accessible data. It is intended to be a map of the entire *Larrea* distribution, and does not depict a plant community dominated by *Larrea*. In many portions of the map *Larrea* may be an infrequent component of the plant community.

Sources

Diverse source data were digitized and used to compile this map. Observations of the contributors, collection localities of voucher specimens, and previously published maps were all used. However, the accuracy of some sources was low and geo-referencing often proved difficult. For these reasons, many boundaries of this coverage conform with the expected local elevational limits of *Larrea*'s range using a Digital Elevational Model with a 1 km grid cell. Source maps and expected local elevational range limits were taken from publications cited below.

General Source Maps and Regional Data on Range Limits:

- Beatley, J. C. 1974. Effects of rainfall and temperature on the distribution and behavior of *Larrea tridentata* (creosote bush) in the Mojave Desert of Nevada. *Ecology* 55: 245-261.
- Benson, L. and R.A. Darrow. 1981. *Trees and Shrubs of the Southwestern Deserts*. University of Arizona Press, Tucson.
- Cole, K.L. and R.H. Webb. 1985. Late Holocene vegetation changes in Greenwater Valley, Mojave Desert, CA. *Quaternary Research* 23: 227-235.
- Hunziker, J. H., R.A. Palacios, L. Poggio, C.A. Naranjo, and T.W. Yang. 1977. Geographic distribution, morphology, hybridization, cytogenetics, and evolution. p. 10 - 47 IN T.J. Mabry, J.H. Hunziker, and D.R. DiFeo, Jr. *Creosote bush biology and chemistry of Larrea in the new world deserts*. Dowden, Hutchinson & Ross, Inc. Stroudsburg, Penn.

- La Secretaría de Programación y Presupuesto. Tráves de la Oordinación General de los Servicios Nacionals de Estadítica, Geografie Informáica, la Sítesis de Información Geográica Estatal, corresponndiente al estado de Coordinación General de los Servicios Nacionales de Estadítica, Geografae e informáoca. Vegetation maps for Mexican states of Zacatecas, 1981; Nuevo Leon, 1981; Coahuila, 1983; and San Luís Potosi, 1985.
- MDEP (Mojave Desert Ecosystem Program). 1998. Map of vegetation types. Mojave Desert Ecosystem Project CD-ROM. UVS4M 12/98 Department of Defense Legacy Program in cooperation with the Department of Interior.
- Morafka, D. J. 1977. A biogeographical analysis of the Chihuahuan Desert through its herpetofauna. *Biogeographica* 9, 313 pp. Dr. W. Junk B.V., Publishers, The Hague.
- Turner, B. L., H. Nichols, O. Doron, and G. Denny. 2002. Atlas of the vascular Plants of Texas. Volume 1, Dicots. Botanical Research Institute of Texas.
- Turner, R.M., J.E. Bowers, and T.L. Burgess. 1995. Sonoran Desert Plants: An Ecological Atlas. University of Arizona Press, Tucson.
- Yang, Tien Wei. 1970. Major chromosome races of *Larrea divaricata* in North America. *Journal of the Arizona Academy of Science* 6: 41-45.