

Short Database Report

Santa Rita Experimental Range Long Term Transect Database

Mitchel McClaran

Abstract: Measures of plant cover and density are available from 130 permanent transect locations on the 21,000 ha Santa Rita Experimental Range. This long-term research area stretches across the western alluvial skirt of the Santa Rita Mountains, about 50 km south of Tucson, Arizona (31°50' N, 110°53' W). Elevation increases from about 900 to 1,450 m, with a corresponding increase in annual precipitation from 275 to 450 mm (fig. 1). Transects were established between 1956 and 1972 and were re-measured every year from 1956-1966, and every three years from 1972-2009 (except 1987). Transects are 30.4 m long and 0.31 m wide, and line intercept measured on the long axis provides an estimate of grass basal cover and shrub canopy cover, and counts of plants rooted in the 9.28 m² area provide estimates of plant density. All previous measurements and UTM coordinates are available on the Santa Rita web site (<http://ag.arizona.edu/srer>). This report describes the available content in the vegetation-plot database "Santa Rita Experimental Range Long Term Transect Database" (GIVD ID NA-US-005).

Keywords: cover; density; long term data; transect.

GIVD Database ID: NA-US-005		Last update: 2012-05-07
Santa Rita Experimental Range Long Term Transect Database		
Scope: Measures of plant cover and density are available from 130 permanent transect locations, that were established between 1956 and 1972 and were re-measured every year from 1956-1966, and every three years from 1972-2009 (except 1987). Transects are 30.4 m long and 0.31 m wide. All previous measurements and UTM coordinates are available on the Santa Rita web site (http://ag.arizona.edu/srer).		
Status: completed and continuing	Period: 1954-2009	
Database manager(s): Mitchel McClaran (mcclaran@u.arizona.edu)		
Owner: Mitchel McClaran		
Web address: http://ag.arizona.edu/SRER/data.html		
Availability: free online	Online upload: yes	Online search: no
Database format(s): Excel	Export format(s): [NA]	
Publication: Santa Rita Experimental Range Digital Database: User's Guide Mitchel P. McClaran, Deborah L. Angell, and Craig Wissler September 2002 USFS Forest Service General Technical Report RMRS-GTR-100 Rocky Mountain Research Station, Ogden, Utah		
Plot type(s): time series	Plot-size range: 9-9 m ²	
Non-overlapping plots: 132	Estimate of existing plots: 132	Completeness: 100%
Total plot observations: 2,084	Number of sources: 1	Valid taxa: [NA]
Countries: US: 100.0%		
Forest: 0% — Non-forest: aquatic: 0%; semi-aquatic: 0%; arctic-alpine: 0%; natural: 100%; semi-natural: 0%; anthropogenic: 0%		
Guilds: all vascular plants: 100%		
Environmental data: altitude: 100%; surface cover other than plants (open soil, litter, bare rock etc.): 100%; other soil attributes: 100%		
Performance measure(s): cover: 100%; other: 100%		
Geographic localisation: GPS coordinates (precision 25 m or less): 100%		
Sampling periods: 1950-1959: 10.0%; 1960-1969: 18.0%; 1970-1979: 18.0%; 1980-1989: 12.0%; 1990-1999: 18.0%; 2000-2009: 24.0%		
<i>Information as of 2012-07-12; further details and future updates available from http://www.givd.info/ID/NA-US-005</i>		

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