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Long-Term Trends in Ecological Systems: A Basis for Understanding Responses to Global Change



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A Basis for Understanding Responses to Global Change

Appendix 20. Average (standard error) plant species richness for sites with data

(Multiple stations are given if possible. Sites are grouped by ecosystem type. See Appendix 28 for length of record for each station.)

| Site code | Station | Richness ¹ | Sampling area |
|------------------|---|-----------------------|---------------------|
| Aridlands | | | |
| JRN | Creosote Study Sites | 4(0.4) | 1 m ² |
| | | 23(1.8) | 49 m ² |
| | Grassland Study Sites | 5(0.6) | 1 m ² |
| | | 35(2.1) | 49 m ² |
| | Mesquite Study Sites | 3(0.3) | 1 m ² |
| | | 17(1.5) | 49 m ² |
| SEV | Playa Study Sites | 3(0.2) | 1 m ² |
| | | 11(0.7) | 49 m ² |
| | Tarbush Study Sites | 4(0.2) | 1 m ² |
| | | 21(1.6) | 49 m ² |
| | Blue Grama Study Site | 10(0.8) | 1 m ² |
| | | 53(2.6) | 40 m ² |
| SRE | Five-Points Grass Study Site | 7(0.6) | 1 m ² |
| | | 32(2.5) | 40 m ² |
| | Five-Points <i>Larrea</i> Study Site | 6(0.5) | 1 m ² |
| | | 32(2.2) | 40 m ² |
| | Burned treatment: pasture 21 | 7(0.8) | 9.3 m ² |
| | Control treatment: pastures 8 and 22 | 9(1.1) | 9.3 m ² |
| WGE | Pastures that were grazed and burned: pastures 2N and 6A | 7(0.3) | 9.3 m ² |
| | Pastures where the existing mesquite were killed and the pastures were grazed: pastures 3, 5N, 5S, 6B and 12B | 8(0.5) | 9.3 m ² |
| | Pastures where the mesquite were killed and the pastures were burned: pasture 2S | 6(0.5) | 9.3 m ² |
| | Grass and scattered shrub vegetation zone | 10(1.6) | 30.5 m ² |
| NTL | Grass vegetation zone | 9(0.9) | 30.5 m ² |
| | Shrubs and sparse grass vegetation zone | 9(0.9) | 30.5 m ² |
| | Shrubs with grass vegetation zone | 9(0.6) | 30.5 m ² |
| | Eastern forests | | |
| NTL | Site 31, Channel Mouth Island | 5(0.8) | 1.25 m ² |
| | Site 50, Southwest Bay of South Trout Lake | 12(1.2) | 1.25 m ² |
| | Site 56, Mouth of Mann Creek | 11(1.1) | 1.25 m ² |
| | Site 7, Rocky Reef Bay | 3(0.6) | 1.25 m ² |
| | Trout Lake | 15(1.2) | 5 m ² |

Long-Term Trends in Ecological Systems:

Appendix 20. Average (standard error) plant species richness for sites with data—Continued

| Site code | Station | Richness ¹ | Sampling area |
|--|---|-----------------------|--------------------|
| Temperate grasslands and savannas | | | |
| CDR | Old Fields 24, 4, 41, 28 | 5(0.2) | 0.3 m ² |
| | | 17(0.5) | 1.2 m ² |
| | Old Fields 72, 35, 45, 5 | 5(0.1) | 0.3 m ² |
| | | 17(0.4) | 1.2 m ² |
| | Old Fields 77, 70, 26, 53 | 5(0.1) | 0.3 m ² |
| | | 21(0.6) | 1.2 m ² |
| KBS | Treatment 7, native successional treatment, abandoned after spring plowing in 1989 | 11(0.5) | 1 m ² |
| | Treatment 8, never plowed, 200 meters (m) south of the others, that serves as an historical control for soil organic matter studies | 8(0.6) | 1 m ² |
| | Treatment SF, old field successional community, never tilled | 11(0.5) | 1 m ² |
| Western forests | | | |
| AND | Watershed 1 | 119(3.6) | 250 m ² |
| | Watershed 3 | 73(3.3) | 250 m ² |

¹ Unit is number of species per sampling area.