



PO Box 14235
Albuquerque, NM 87191
(505) 296-1937
www.prairiedogpals.org
prairiedogpals@comcast.net

What good are prairie dogs?

- Prairie Dogs are a keystone species important to 200 other species of wildlife. They provide homes or shelter, enrich plant communities in their habitat, help to maintain the health of arid grasslands, and are a food source. Nine species are considered to be dependant (the federally endangered black-footed ferret (*Mustelanigripes*), burrowing owl (*Athene cunicularia*), mountain plover (*Charadrius montanus*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), swift fox (*Vulpesvelox*), horned lark (*Eremophila alpestris*), deer mouse (*Peromyscus maniculatus*), and northern grasshopper mouse (*Onychomus leucogaster*). From Bison to horned lizards, prairie dogs benefit biodiversity.
- Burrowing animals, like prairie dogs, open breathing tubes in the earth. The underground aquifers act like the diaphragm in human bodies, the moon as it passes raises and lowers the underground water table and the Earth breathes through the many fissures and tubes opened by the burrowing creatures. The exhalation of moisture-laden air, filled with negative ions, helps create rain.

There is an old Navajo warning that, if you kill off the prairie dogs there will be no one to cry for rain. Bill Mollison, the father of permaculture, notes in response that:

Amused scientists, knowing that there was no conceivable relationship between prairie dogs and rain, recommended the extermination of all burrowing animals in some desert areas planted to rangelands in the 1950s... in order to protect the roots of the sparse desert grasses. Today the area (not far from Chilchinbito, Arizona) has become a virtual wasteland. Fierce run-off, soil compaction, and lack of fresh seedbed have carried the grasses away.

- Burrows act as aquifers that prevent water from eroding land while helping to keep it cool.
- Prairie dog burrowing can be beneficial to the soil because mixing soil types and incorporating organic matter enhances soil formation. It also helps to increase soil aeration and decrease compaction.
- In short-grass prairies, the number of plant species, particularly forbs, increases because of the digging and scratching activities of prairie dogs that disturb the soil. These patches of bare soil provide excellent sites for annual forbs to become established. Long-term use of an area by prairie dogs appears to promote buffalograss and grama grasses (Foster & Hygnstrom).
- In addition to digging up the soil, prairie dogs clip the vegetation around their burrows, enhancing nitrogen uptake by these plants.
- Prairie dogs might also redress some of the problems with overgrazing. For instance, prairie dogs can control noxious weeds and native invaders that proliferate on overgrazed rangeland. An example is prairie dog control of mesquite (Miller et al. 1996; Miller and Ceballos 1994). They remove pods and seeds and nip and strip bark from young seedlings, which contributes to seedling mortality.