

Prairie Dogs



Prairie Dogs

- ▣ The Navajo Nation is home to one of the largest population of Gunnison Prairie Dog
- ▣ 25% of its rangeland is located on the Navajo Nation
- ▣ Habitat for Prairie Dogs on Navajo Nation has declined by 98%
- ▣ Reason for decline
 - Massive habitat conversion
 - Plague
 - Eradication Program



Prairie Dog



- ▣ Prairie Dogs are social mammals,
- ▣ Live in large group called towns,
- ▣ They section off into small family units,
- ▣ Mostly feed on grasses, forbs, and sedges,
- ▣ Live 4-5 years

Prairie Dogs

- ▣ Prairie dogs are an important part of the Natural Environment
- ▣ Considered a “keystone species”,
- ▣ Help maintain the desert grassland
- ▣ They help determine the number of diversity of other species in the desert grassland
- ▣ Species diversity is greater inside a prairie dog town as compared to outside
- ▣ They create habitat for many other species.



Prairie Dogs



- ▣ The burrow of Prairie Dogs are used by many species of mammals, reptiles, and invertebrate predators
- ▣ Use burrow to survive difficult conditions like the summer heat, cold weather, etc.
- ▣ Scientist have found over 200 animal species using these Prairie Dog Towns

Prairie Dogs

- ▣ Prairie Dog Burrow:
 - 15 Feet Deep
 - Have separate Chambers for Nesting, Raising Young, Food Storage and bathrooms,
 - They have two entrance for air flow and escaping predator
 - Help control flooding and reduce erosion by channeling rain water into lower soil level,
 - They encourage plant growth by increasing soil aeration and reduce soil compaction



Prairie Dogs



- ▣ Prairie Dogs themselves serve as food for many predators, such as:
 - Black Footed Ferret & Other Weasels
 - Red, Gray & Kit Foxes
 - Coyotes
 - Badgers
 - Golden Eagles
 - Ferruginous & Red Tail Hawks

Gunnison Prairie Dog



Prairie Dog Town



Not Always Compatible with Agriculture



Prairie Dog Control

- ▣ Navajo People have concerns about prairie dog
- ▣ Some Examples:
 - They carry the plague
 - They destroy crops
 - They are moving into Housing areas-which is a Health concern
 - And many other issues with prairie dogs



Prairie Dog Control



- ▣ Navajo Fish and Wildlife Predator officer can assist you with issue involving Prairie Dogs
- ▣ They can be contacted at 928-871-6451
- ▣ Program Manager is Jeff Cole
- ▣ Tour of Duty is Monday through Friday 8am to 5pm
- ▣ They do work weekends when needed.

Prairie Dog Control

- ▣ At least 10 to 15 mounds per acre to economically justify control
- ▣ Rest rotation and light stocking rates can reduce potential prairie dog invasion in mid to tall-grass prairies
- ▣ Be alert for endangered black-footed ferrets and burrowing owls

Regulations

- ▣ Label for Restricted Use Pesticides (Aluminum Phosphide) state “may not use this product for control of prairie dogs unless a pre-control survey has been conducted”.
- ▣ “Contact NNDFW-NHHP to determine if black-footed ferret survey requirements are required.”

Regulations

- ▣ If black-tailed prairie dog town is > 80 acres (> 200 acres for Gunnison prairie dogs) within a 4.5 mile radius, then a ferret survey must be conducted
- ▣ **UNLESS** obtain approval from NNDFW-NHP.

Black-Footed Ferret



Burrowing Owl



Prairie Dog Exclusion

- ▣ Exclusion is rarely practical
- ▣ Discouraged by tight-mesh, heavy-gauge, galvanized wire
- ▣ 5 feet tall with 2 feet buried in the ground

Prairie Dog Control - Cultural Methods

- ▣ Reduced prairie dog numbers by plowing or disking town and leaving fallow for 1-2 years
- ▣ Establish tall grain crops after second year
- ▣ Flood irrigation

Prairie Dog Fumigants – Aluminum Phosphide

- ▣ Cost 5 to 10 times more per acre than poison grain baits (\$0.32 per burrow)
- ▣ Practical when nontarget wildlife mortality, public relations and other considerations eliminate other methods.
- ▣ Aluminum phosphide (Fumitoxin or Phostoxin) is 95 - 100% effective
- ▣ Must have good soil moisture to keep gas concentrated in burrow

Fumitoxin



Prairie Dog Fumigants – Gas Cartridges

- ▣ Gas cartridges 35 to 65% effective
- ▣ Not a restricted use pesticide
- ▣ Approved by American Veterinarian Association as humane method to euthanize (carbon monoxide)
- ▣ Nontarget animals within treated prairie dog holes are normally killed

Gas Cartridge



Economics

- ❖ Aluminum Phosphide (95% – 100% efficacy)
 - \$16.00 per acre
 - \$0.32 per burrow opening * 50 burrow openings per acre
- ❖ Gas Cartridges (35% – 65% efficacy)
 - \$100 per acre
 - \$2.00 per burrow opening * 50 burrow openings per acre

Remember!

- ▣ Follow the Label on all toxicants and fumigants
- ▣ Proper Licensing (private applicator license not valid for use on schools, parks, BLM, USFS, NPS, etc.)
- ▣ Be alert for burrowing owls
- ▣ Contact NNDFW-NHP regarding black-footed ferret issues

Trapping and Shooting Prairie Dogs

- ▣ Traps place in burrow entrances work well
 - ▣ Trapping impractical for large colonies
- ▣ Consistent shooting can remove 65% of population during the year
 - Expensive and labor intensive
 - Rarely proves to be practical form of control
- ▣ Navajo Nation Small Game Permit is required to remove Prairie Dogs from Navajo Nation Land

ANY QUESTIONS

