

Open Burning and Fire Safety

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Prescribed or controlled burning of pastures and prairies can improve health and increase vigor of native bunch grasses and wildflowers. Burning will release native plant seed for germination while reducing the existing non-native plant populations, including weeds and other invasive species. In order to have an open burn, a burn permit must be issued from your local rural fire district. Burning without the issuance of a burn permit can result in a citation which carries a fine of \$100 to \$500.

All rural fire districts are volunteer operated and therefore you need to plan ahead before burning. Most stations

do not have staff waiting to take your call and it may take a few days before a permit can be issued. Once a burn permit has been issued, the officer will contact the 911 dispatch center so they have a list of licensed burns in case a fire is called in. Several rules and regulations for open burning must be followed by order of Nebraska State Statute 81-520.01.

1. An open burn must be attended at all times.

2. Materials that can NOT be burned include plastics, rubber, oil, tires, building materials containing petroleum products, treated wood, pesticides, herbicides or other hazardous wastes and materials.

3. The fire(s) shall be at least 50 feet from your own buildings and at least 300 feet from neighboring buildings.

4. Open burning will not be permitted if the wind is blowing more than 15 mph.

5. Fires can only be burning between times stated by the officer issuing the permit.

6. The fire may be extinguished by the fire department at any time if (a) conditions have changed and have become too dangerous to continue burning, (b) complaints are received regarding the fire/smoke or (c) if any above rules and regulations have been violated.

The rule of thumb with safe burning materials is if the fire is giving off black flames, there is a material in the pile that should not be burning. If you have any questions or concerns about the materials that you plan to burn, an officer from the fire district can look at the burn pile or grassland to be burned

and make safety recommendations. Prescribed burns are also possible to set up through your local fire district. Call well in advance to set up a date for them to burn.

Trash barrels do not require a permit to be burned. However, several safety precautions should be followed when any type of outside burning is done. Be very mindful of the weather at all times. Windy days can blow burning material and grass fires ignite easily during dry weather. Keep a grate over burning trash barrels to hinder sparks from being thrown. Keep a hose nearby and wet down the area around the burn. If the fire gets out of control, call 911 immediately. Rural fire districts take longer to respond so don't waste time trying to fight the fire yourself.

WATERWHEEL

Emergency Water Purification



The following methods are recommended for use during an emergency to disinfect small quantities of contaminated water for drinking, cooking or brushing teeth.

Bacteria inside solid particles such as soil, are harder to kill than bacteria in the water itself. If the water source is cloudy or muddy, first clarify the water by letting it settle. After most of the suspended particles have settled to the bottom of the container, gently pour the clear water off the top into a second container being careful not to agitate the liquid more than necessary. This water should then be filtered by pouring it through a clean cloth or other filter media such as coffee filters. Disinfect the filtered water by boiling or by chlorination.

To disinfect by boiling, bring water up to a rolling boil and boil for at least 5 minutes. Add an extra minute for each 10,000 feet of elevation. Boiled water tends to taste flat. Re-oxygenating the water by pouring it back and forth between two clean containers will improve the taste.

To disinfect by chlorination, use ordinary household chlorine bleach. Be sure to use bleach that does not have fragrances, soaps or other additives. Common bleach should contain 5.25 percent sodium hypochlorite. Add 8 drops per gallon for clear water and 16 drops per gallon for cloudy water. Stir the water and allow it to stand for 30 minutes to give the chlorine time to kill the micro-organisms present.

For chlorine to be effective, it should be detectable by odor and taste after the 30-minute waiting period. If the water does not taste and smell of chlorine at that point, add another dose and let it stand another 15 minutes.

If the chlorine taste is too strong in the water after disinfection, pour it from one clean container to another several times. This will drive some of the chlorine off as a gas, lowering the level of chlorine in the water and improve its taste. (DJ)

Obtaining Burn Permits from Lancaster County Fire Districts

Each rural fire district varies in the procedure they use for issuing burn permits. The following list provides the primary contact number for each district along with any special issuing instructions. In case of fire, call 911, not the rural fire district.

BENNET RURAL FIRE DISTRICT: 782-6195

(Serves villages of Cheney and Bennet)
Permits written out only on Saturday morning for weekend burning only.

CERESCO RURAL FIRE DISTRICT: 665-2391

(Serves Davey and Ceresco)
Obtain permit from clerk at City Hall. Permits are good for one week.

CORTLAND RURAL FIRE DISTRICT: 798-7875

(Serves Panama and Firth)
Permits issued by any officer including bankers in both Firth and Panama. Issued for the day of burn only.

HALLAM RURAL FIRE DISTRICT: 826-9483

Obtain permit from any officer
Permits can be issued in advance, but must call the day of burn

HICKMAN RURAL FIRE DISTRICT: 792-2080 or 792-2391

(Serves Roca and Hickman)
Permits issued between 7-7:10am each weekday at the station. Make appointment to obtain permit on Saturday.

MALCOLM RURAL FIRE DISTRICT: 796-2501 or 783-2563 or 796-2535

Permits issued for day of burn only.

PLEASANT DALE RURAL FIRE DISTRICT: 795-3250 or 795-3595

RAYMOND RURAL FIRE DISTRICT: 785-5105

(Serves Denton, Sprague, Rokeby, Martell, Yankee Hill and Emerald)
District operates out of three stations and serves the villages of Denton, Sprague, Rokeby, Martell, Yankee Hill and Emerald
Obtain from any officer or stop by or call Station #1 (705 West Burnham).

SOUTHWEST RURAL FIRE DISTRICT: 423-0230

Leave message during week or call between 8am-Noon on Saturday to reach volunteer staff. Issued for the day of burn only.

WAVERLY FIRE & RESCUE DEPARTMENT: 786-3055

Permits issued at city office Monday through Friday 8-4:30pm or from fire station on Monday evenings 7-8:30pm



Grasshopper Control

Grasshopper populations fluctuate in cycles. High or very high populations may be present for two to four years followed by low to moderate populations for several years. Even when overall populations are relatively low, grasshoppers in and around the garden can be a nuisance. In outbreak years, however, grasshoppers can destroy unprotected gardens and threaten small trees and shrubs.

There are several natural enemies of grasshoppers. A few of the most common and effective predators of grasshoppers include robber flies, spiders, and blister beetle larvae

(on egg pods). A fungal disease caused by *Entomophthora grylli* may noticeably impact grasshopper populations during non-drought years.

Perhaps the most effective and practical natural enemy for use in yards and gardens is poultry, especially guinea hens and turkeys. However, some

poultry may cause substantial injury to the garden.

Chemical control is often the best alternative for eliminating heavy infestations of grasshoppers. Adult grasshoppers are difficult to control with insecticides due to their size and decreased susceptibility to the insecticides. The best time to control grasshoppers is during the 3rd and 4th instars when they are 1/2 to 3/4 inch long. These stages will occur in mid-to late-June. At this time, most eggs will have hatched and the young hoppers will be more susceptible to insecticides. Also, they will still be concentrated in their



Migratory grasshopper fourth instar nymph.

hatching areas, and they can be controlled more effectively than when dispersed later in the summer.

Grasshopper management can be effective and practical, if the area to be protected is relatively small and isolated; however, protecting a garden from grasshoppers moving out of a large area of adjacent grassland or cropland may be impossible. (DJ)



Differential grasshopper 4th instar nymph