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Building a Top Screen for a Burning Barrel

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Be sure to keep a 10-foot area surrounding your burn barrel clear. Accumulated debris, such as pictured above, can be ignited, leading to a destructive fire.

4. Unless prohibited by local ordinances, state regulations allow the burning of household refuse on residential premises by the individuals residing on the premises, provided no nuisance or traffic hazard is created. Before burning, check with your local fire department for any additional restrictions that may apply.
5. Remember that the remaining ashes in the burn barrel are considered solid waste and must be disposed of at a licensed landfill.

Some Alternatives to Burning Household and Yard Wastes

- **Reduce usage** – Buy in bulk or larger quantities and demand less packaging on the products you buy.
- **Reuse** – Find someone else who can use unwanted items, have a yard sale or donate them to a resale organization.
- **Recycle** – Newspaper, office paper, cardboard, corrugated cardboard, magazines, aluminum, metal and many types of plastics can be recycled.
- **Compost** – Leaves and plant clippings can be turned into a rich compost for your yard and garden.
- **Chip brush and clean wood** – Turn brush and clean wood into mulch or decorative chips or use as fuel in wood stoves or boilers.

For more information about what items may be disposed of at licensed landfills, contact:

Integrated Solid Waste Management Section
Department of Environmental Quality
(402) 471-2186

For information on regulations covering other types of open burning contact:

Air Quality Division
Department of Environmental Quality
(402) 471-2186
and
Your local fire chief

Nebraska Forest Service
Rural Fire Protection Program
P. O. Box 830815
Lincoln, NE 68583-0815
(402) 472-2944
(402) 472-2964
www.nfs.unl.edu

Written by Bob Vogltance and Larry Wiles, Nebraska Forest Service
Photo: U.S. Environmental Protection Agency

Nebraska Forest Service

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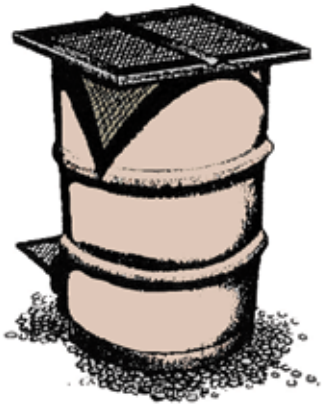
Building a Top Screen for a



Burning Barrel

RFP05-07

University of Nebraska

Wildfires caused by burning debris cost Nebraskans more than $1 million each year. For the past several years, debris burning has been the number one cause of wildfires and consistently burns more acres than any other human-caused fires.

At least 50 percent of these wildfires could be prevented by using 55-gallon metal drums as burn barrels and covering the barrel with a top screen. The top screen is necessary to safely burn debris.

Selecting Materials

Materials needed for the top screen are listed below. Savings are considerable when materials are bought in volume. To take advantage of this, you may wish to contact your local high school's industrial arts teacher about incorporating this as a class project.

Materials and Equipment Needed

A top screen can be easily made with relatively inexpensive materials.

- 1 piece angle iron 8' x 1" x 118"
- 1 24" x 24" piece ½' #13 flattened, expanded metal
- welding torch

Directions

1. Cut three notches (90° each), spaced 25 inches apart, in the angle iron.
2. Cut a 45° angle on each end of angle iron.
3. Heat the outside of the angle iron at the notch and bend it to a right angle. Repeat at each notch.
4. Apply heat to area where 45° angles join and weld together.
5. Lay frame upside down, place the expanded metal inside the frame and weld it to the frame.

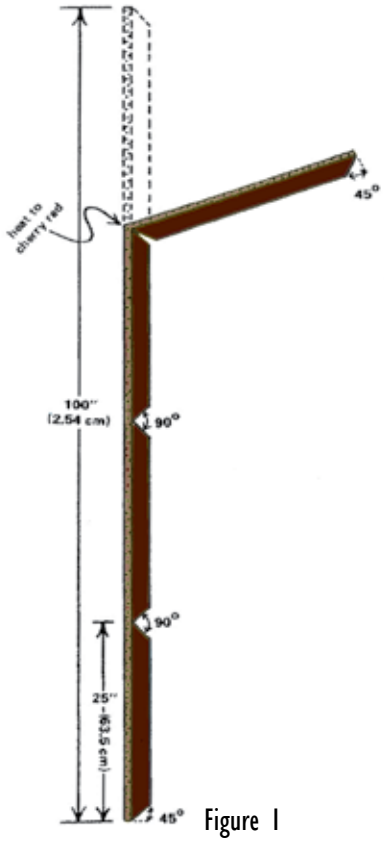


Figure 1

Figure 1 shows the five steps in building the top screen.

Your completed frame should look similar to the frame pictured in Figure 2. You may also want to weld a handle to the top screen or design and build a hexagonal- or octagonal-shaped top screen.

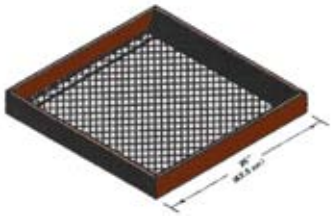


Figure 2

Preparing the Barrel

Very little work needs to be done on the 55-gallon barrel. However, be careful when cutting the end from the barrel. If the barrel was used to store or transport flammable liquids, an explosion could occur from a spark or open flame.

The burning barrel will be more rust-resistant if a small hole is drilled in the bottom to let rainwater drain. Draft holes are not advised. Combustion is complete without draft holes and the fire containing capacity of the barrel is not compromised.

You may also want to paint the barrel's exterior with a heat-resistant paint to make it more attractive.

Your finished burn barrel should look something like the one in Figure 3.

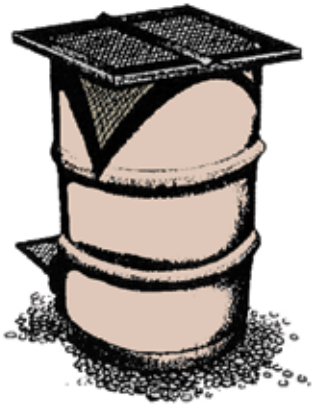


Figure 3

Additional Precautions

Using a top screen for your burn barrel will help prevent wildfires. It is necessary, however, to exercise reasonable care and good judgment. The following guidelines are still important:

1. Never locate a burn barrel upwind from buildings or other high-hazard areas.
2. Always place the barrel in a cleared area. This area should be free of combustibles for 5-10 feet in all directions around the barrel.
3. Never remove the top screen when you have a fire in the barrel. Refill with trash only after the fire is out.