



Burning Lens

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If you are new to primitive fire making with a magnifying lens, please read through the following technique to help you get started. Solar ignition is a 100% renewable resource, BUT.... it does have one limitation: **it requires full sun and clear skies with no obstructions.** The process may take a little practice to master, but is a fun & useful bushcraft skill to have in your bag of tricks.

Tips before you get started:

Although you can sometimes light dry grasses and such directly, it's best to create a small ember on a tinder material that can be transferred into a bird's nest bundle of grass/light tinder and then blown to flame. Charcloth is the preferred choice as it will easily generate a lasting and easy-to-handle ember. Other resources such as dry bark & punkwood can also work.... Just avoid anything that is oily or waxy. They don't work well at all with solar because it the heat produces a "wet" texture. You want tinder that's as dry as possible. Also, if you're not dung averse, pellets dropped by rabbits, deer, elk, etc. are little more than compressed plant fiber. When these pellets are completely dry, they can make excellent tinder for solar. The #1 rule is **DRY.**

Technique:

1. Using your thumb and index finger, grasp the lens around the outside so that you can look through it.
2. Locate the sun in the sky and position yourself so that the sun is unobstructed as you are holding the lens, and your charcloth and larger tinder bundle is on the ground in front of you.
3. Start by holding the lens about 6-8 inches from your tinder material, and slowly begin to adjust the angle of the lens in relation to the sun until a bright spot appears on the ground. Try to center the bright within the shadow made by the lens. This gives you the best possible angle in relation to the sun.
4. While maintaining the bright spot, move the magnifying lens forward or back until the light is as focused the bright spot is as small as possible. At its smallest size the sun's rays are focused into that single pinpoint generating maximum heat.
5. Reorient yourself as needed to focus the pinpoint on your charcloth or tinder. You should begin to see smoke after just a few seconds. Once smoking, make slow, very tight overlapping circles with the light on the tinder.
6. When using charcloth, this process should only take 5-10 seconds with good sun. You'll know it's lit when you can take away the lens and the tinder still smolders, or you can see a red-hot ember.
7. Once smoldering, this ember you've created can then be carefully and delicately be placed into a birds-nest of dry grasses or other light tinder which should ignite after some careful blowing and manipulation.

!!WARNING: NEVER LOOK DIRECTLY AT THE SUN THROUGH THE LENS!!