3.5 Firebuilding

"Then the fire of the LORD fell and burned up the sacrifice, the wood, the stones and the soil, and also licked up the water in the trench."

1 Kings 18:38

Objectives:

Recruit

1. Define each of the following terms and show an example of each:
   a. Tinder b. Kindling c. Firewood
2. Correctly prepare an area for a fire.
3. Demonstrate the building of a simple fire.
4. Demonstrate the proper method to put out a campfire.

Camper

1. Name the best type of wood for each of the following and show an example of each:
   a. Cooking fire b. A quick fire for heat
2. Build each of the following fires and demonstrate their use:
   a. Tepee b. Lazy man
   c. Council d. Keyhole
3. Demonstrate how to correctly light a fire and keep it going.

Frontiersman

1. Prepare and area for, build, light, use and extinguish each of the following types of fires:
   a. A tepee fire b. One other type of fire

UNIT 3

CAMPING

CHAPTER 5 FIREBUILDING



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TIPS TO REMEMBER

FIREBUILDING: "If you teach it inside, it's arson. If you teach it outside, it's firebuilding."

Applying God's Word to the Lesson

DEVOTION #1

Genesis 22:6-7 ***Abraham took the wood for the burnt offering and placed it on his son Isaac, and he himself carried the fire and the knife. As the two of them went on together, Isaac spoke up and said to his father Abraham, "Father?" "Yes, my son?" Abraham replied. "The fire and wood are here," Isaac said, "but where is the lamb for the burnt offering?"***

One of the chores that always goes with camping is the chore of building a fire. It is an important job because our comfort and warmth depend on it. Before you can just build a fire, one thing has to be done first. You have to go out into the woods and gather wood. Or, you have to go to the car and carry the wood which you brought along. That is often hard work to carry all the wood, sometimes over a great distance.

Isaac, Abraham's son, had to carry the firewood too. He carried the firewood as he and his father went to Mt. Moriah. There they were to make a sacrifice in fire to the Lord as they worshiped. Isaac was puzzled. There was plenty of wood to build a fire but no animal to sacrifice. Little did he know that he was to be the sacrifice that day. How ironic, how strange, that Isaac should have been the one to carry the wood for his own sacrifice! What a horrible burden to bear!

You and I carry such a horrible burden in our souls. That burden is the load of sin. That is the load of all the things we've done wrong over our lives. That is the load of being aware of how bad we really are on the inside. That is the horrible burden of feeling guilty, of feeling the fire of God's anger at us for being sinners. But Isaac didn't die. When Abraham was ready to plunge the knife into his heart the Lord stepped in and stopped him. And instead a ram was found, provided by God himself, to take Isaac's place on top of that altar. That ram was killed and burned in the sacrifice on Mt. Moriah. Just as Isaac didn't have to die there, neither do we.

God has provided someone to be sacrificed for our sins, in our place. That someone is his own Son, Jesus Christ. Jesus lovingly carried the burden of all our sin and willingly placed himself in the fire of God's anger at sin. There, on the cross at Calvary, Jesus was burned up by God's wrath. The fire is out. There is no more anger. God now only loves us. So you may have to carry the burden of the wood for the campfire, but you will never again have to carry the burden of your sins.

PRAYER: Dearest Lord Jesus, we sinners carry a great burden of sin. We not only do things wrong, but we are all wrong on the inside. We believe that you carried that sin for us. Please comfort us with your forgiveness and teach us never to carry our own sins. Keep us safe in this faith. Don't let us ever lose you as our Savior. Take our hearts and make them yours, Lord Jesus, for we belong to you. Amen.

HYMN: 325 v. 1,5-6 (TLH) 385 v. 1,4-5 (CW)

Applying God's Word to the Lesson

DEVOTION #2
TEXT: Exodus 3:2-4
THEME: The Lord's Fiery Zeal to Save Us.

Fire is a very dangerous and powerful force. We must always be careful around fire. The Lord appeared to Moses in a fiery bush that didn't burn up. This kind of appearance was only the first of many in which the Lord would appear to His people at a time of particular need.

That fiery appearance was often called "the glory of the Lord." Here this fire represented God's power and might. It also represented his burning desire to save his people from the oppression of slavery. And that is why he appeared to Moses here: to begin the deliverance from the slavery of Egypt.

That same zeal is at work among us to save us from our sins. That same fiery zeal sent Jesus down to be the sacrifice for our sins. And that same fiery zeal wants to see to it that each and every one of us is with him in heaven.

PRAYER: Dear Lord, you are powerful and mighty. We are comforted in knowing that your power and might are being used to help us. Defend us from Satan by forgiving all our sins. Keep us safe until we reach our heavenly home. Amen.

HYMN: 657 (TLH) 369 (CW)

DEVOTION #3
TEXT: Acts 2:3-4
THEME: Be Filled with Fire

OUTLINE
1. Fire often represented the presence of the Holy Spirit. Let the Holy Spirit fill you with faith in the Lord Jesus.
2. Let the Spirit's fire show in your love for your Savior.

Additional References:

- Genesis 22:6,7
- Exodus 3:2-4
- Leviticus 6:12
- 1 Kings 19:6
- Psalm 11:6
- Proverbs 6:28
- Proverbs 25:22
- Proverbs 26:20,21
- Isaiah 1:31
- Isaiah 44:19
- Isaiah 47:14
- Ezekiel 4:12
- Ezekiel 15:4,6
- Ezekiel 39:9,10
- Matthew 7:19
- Matthew 18:8
- Luke 3:16
- John 15:6
- John 21:9
- Acts 2:3,4
- Acts 18:18
- Acts 28:2,3,5
- Romans 12:20
- 1 Thess. 5:19
- 2 Timothy 1:6
- Hebrews 12:29
- James 3:5,6

HYMN: 235 v. 1-2 (TLH) 184 v. 1-2 (CW)

1 Introducing the Lesson

This is another lesson that will not require any special techniques or methods to get the attention of the Pioneers. Most boys enjoy fires and are eager to build them. The key for you, as a leader, is to control that energy for the sake of safety.

One way you might introduce the lesson is to have the boys meet at a local campground or park, where you have reserved a number of sites for the use of their firepits. By beginning at a site where Pioneers can make practical use of fire, it may be easier to help them focus on using fire properly and safely.

As you may sense, the most important aspect of this lesson is safety. A fire that puts people or other life in danger is not worth building, no matter what its intended purpose is.

After safety, there are a number of important concepts to give attention to in this lesson.

- Uses and reasons for firebuilding
  - ◊ Survival: the first thing to do when you are lost is to build a fire; it can save your life.
  - ◊ Cooking: there is great satisfaction and taste that comes with campfire cooking.
  - ◊ Heat: fire can assure comfort and even life on a cool or cold night.
  - ◊ Recreation: flames can calm and mesmerize even the toughest day.

CHAPTER 5 - *FIRE BUILDING*

"Can a man scoop fire into his lap without his clothes being burned? Can a man walk on hot coals without his feet being scorched?"

Proverbs 6:27 - 28.



David loved King Saul because Saul was chosen by God to rule his people. Saul did not return that love. Within his heart a raging fire burned out of control and countless times he tried to kill David. The fires of jealousy can destroy a man just as quickly as a roaring forest fire. Play with fire of either sort and you will get burned. Thank God that you have been rescued from the fires of hell by your loving Lord. Now be careful with every sort of fire.



For centuries, fire has been both a friend and a foe to man. A fire can keep you warm, dry your clothes, cook your food and cheer you on a dark and gloomy night. An evening campfire, whether in your back yard or in a National Forest, draws people together in a bond of friendship and peace, but that same fire can turn quickly from a friend to a foe if you are careless. Smoky Bear says, "Only you can prevent forest fires." Before you go camping this year it is important that you learn how to start, control, and put out a fire.

There are many different types of fires but only three uses. A fire can be used to cook your food, to warm you when you are cold, or to provide entertainment during a campfire program. Before building any of these fires it is important that an area for the fire be prepared, and all the materials gathered that will be needed.

Possible Materials for Teaching and Demonstrating this Lesson

Samples of various types of wood (logs, of course, are preferred to cut lumber)

Magnifying Glass

Flint & Magnesium Fire Starter

Examples of tinder, kindling, and other wood

Weber® portable fireplace(s) (if regular pits are not available)

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BUILDING A FIRE

The campfire should be built in the center of a circle that has been cleared of all burnable materials. A small fire requires about a six-foot circle and a large council fire requires a ten or twelve-foot circle (see Figure 5-1). Not only should all of the burnable materials be cleared from around the fire on the ground, but from overhead as well. Never build a fire under a small tree or low overhanging branches.



Figure 5-1

Before striking the first match, gather all of your materials. THIS IS VERY IMPORTANT. Once you light your fire you will not have time to gather the things you need to keep it going and you will end up starting over again.



Figure 5-2

The first item you will need for a fire is tinder. Tinder is any material that lights quickly and burns fast. Some examples of good tinder are birch and cedar bark from dead and down trees, dry cattails, dry pine needles, dry weeds and grass, and small wood shavings, especially from soft woods like pine. Two handfuls of tinder should be enough to start the fire. You will use the tinder to ignite (light) your fire. (See figure 5-2)

There are other items that can help to light the fire. Some of these will work if your wood is a little bit damp. One of these igniters is a magnesium fire starter. This is a bar of magnesium with a striking flint on one edge. You scrape small bits of magnesium off of the bar with your knife and then create a spark with the flint to ignite the magnesium. It burns very quickly and very hot so you must have it in

- The types of fires to build and the proper woods to use for these applications
- Various types of fire starters (natural and synthetic)
- Rules concerning the gathering of firewood and the difference between dead trees and trees without leaves.

While it is important to teach different applications to fire building, it is equally important to keep their training separate. DO NOT wait until it is time to cook a meal at camp to teach firebuilding. This takes valuable time away from cooking the meal and other camp activities. These skills should be taught separately and then combined in their application at campouts and outings.

To introduce the lesson, you might ask the boys to list different applications for which they have built fires and the ways these fires have differed.

It will not be hard for boys to see practical uses for building fires, especially if camping and "wilderness" outings are a regular part of your Pioneer program.

Other Possible Materials for Teaching and Demonstrating this Lesson

Candle Wax and/or Paraffin

Vaseline® Petroleum Jelly & Cotton Balls

Empty Cardboard Egg Cartons & Wood Shavings

Commercially Produced Fire Starters

Small Pot & Egg

2 Teaching the Lesson

This lesson naturally lends itself to visual presentation and demonstration rather than to indoor lecturing. It is also a lesson for which it is a good idea to teach in small groups. This allows for the proper supervision and for all of the boys to get their hands in on building fires.

"Expert" Presenters

There are some people you can ask to come in to present this lesson to the boys and give them a unique perspective.

- ODP's will be able to teach the skills to building campfires, skills that do not change over time.
- Local firefighters certainly know about fire and can speak about building and safely extinguishing fires.
- An environmental scientist, forester, DNR worker, or arborist could speak about different types of wood and their uses and qualities as firewood.

Field Trips

As stated in the introduction to the lesson, it is a good idea to choose a different site for your firebuilding training than the church where you normally meet. A state or county park works especially well for this purpose. If you do not have access to such a site and do not have grounds at your church where you can build a fire, you can use portable outdoor fireplaces in your church parking lot for demonstrating and building fires.

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your tinder so that will light. Another igniter is cotton balls dipped in "Vaseline." This also lights quickly. Of course, the most common igniter is a match. The best kind are wooden kitchen matches that can be struck anywhere. Be sure to keep them dry in some type of waterproof container like the one pictured in figure 5-3.



Figure 5-3

The next material you will need is kindling. Kindling is small sticks of dry wood that do not catch fire as easily as tinder, but once burning, will burn hotter and longer than tinder. Two or three handfuls of kindling should be enough to keep your fire going until the firewood starts burning. The type of firewood needed will depend on what the fire is to be used for. When building a quick fire for heat, softwood such as pine, birch and spruce will work the best. Hardwood, such as oak, hickory, maple and ash will provide excellent coals for cooking. Whatever type of wood you choose, the wood pile should have more than enough wood to get the job done.

To build a fire, take the tinder and place it in the center of the cleaned circle. Build a teepee over the tinder with your kindling. On the upwind side of the fire, leave room between the kindling to light the tinder later. Don't put too much on or the fire will not be able to "breathe."



Figure 5-4

Build another teepee over the kindling with firewood, again allowing enough room for air around the tinder and kindling. (See figure 5-4)

Now, with your back to the wind, light the tinder. If the fire has been built properly, the tinder will burn long

Other than this possible off-site teaching, there are few places to visit to teach firebuilding.

Other Resources

There are other resources available to help you learn more about firebuilding before you present the lesson. These might give you new ideas or tools to use for your presentation.

- *The Boy Scout Handbook* gives good illustrations of different types of fires and examples of fire starters.

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enough to ignite the kindling and firewood.

Once your fire is going, it is important to use only enough firewood necessary to keep the fire going. Too little firewood and it will soon go out. Too much firewood and the fire will be too large. Once the fire is going, never leave it unattended. Remember what Smoky the Bear says, "Only you can prevent forest fires."

PUTTING OUT A FIRE



Figure 5-5

It is just as important to know how to put out a fire as it is to know how to start one. When you are done, sprinkle water on the fire (don't pour). Stir the fire with a stick and then sprinkle more water on it. (See figure 5-5) When you think it is out, pour water into the fireplace and stir it well, making sure that all the coals are "dead" or cold. Unless you have built the fire in an established fire pit, the ashes should then be buried in your latrine or garbage hole. Remember a good camper leaves his site better than he found it. This certainly applies to fire sites also.

TYPES OF FIRES



Figure 5-6

There are many different types, or styles of fires depending upon what you want to use it for. The most common fire is the Teepee fire. Standing alone, it is a good source of heat. With a grate built over it, it makes a good cooking fire. The Teepee fire can also be built between two logs or between field stones and used for cooking (see Figure 5-6).



Figure 5-7

The Lazy Man's fire, as shown in Figure 5-7, is an entertainment type fire and will last a long time. As the ends

- The internet is a good source of information about the latest items available for purchase as fire starters, and you might also find information about different fire starters you can make and about different types of wood.

Projects & Activities

Getting the boys involved in projects and activities will often keep them interested in the subject matter and make it more memorable. Here are a few ideas for teaching *Firebuilding*.

- Show examples of different types of wood and explain their identifying features and best uses. Note the woods to avoid when cooking (e.g., aspen, which contains chemicals that ruin food flavor; pine, which burns too fast and hot; and treated wood, which contains poisonous chemicals).

- At a site with at least four firepits, break your group into four small groups. At each pit, have the necessary wood for building a different type of fire (tepee, council, lazy man). Instruct how to build the fire in each pit and have the boys build the fire (but not light it) before moving on to the next pit. Then knock down the materials and start again. The fourth pit can have a fire burning, on which the boys can roast marshmallows.

- Build fire starters that can be carried along on a camping, canoeing, or backpacking trip, in case of inclement weather. These can be candle wax melted and poured over wood shavings in egg cartons or newspaper rolled, tied, and dipped in paraffin.

- Start a fire with various non-match fire starters (magnesium, flint, magnifying glass, bow & sticks).

- Combine with a compass course, directing the boys to places where firebuilding materials have been placed in advance, as a competition to find the materials and build a certain type of fire.

AV Materials for This Chapter
Available from Lutheran Pioneers

AV 112 *FIRE BUILDING* - 58 Minutes - Ages 8-Adult

AV 116 *AXE, KNIFE AND FIREBUILDING* - 10 Min. each - Ages 8-Adult

AV 419 *FIRE ECOLOGY* - 13 Minutes - Ages 6-9

3 Practicing and Testing the Material

A great way to practice and test this material is by using the activities and projects in the lesson. However, for this lesson, there are additional ways to test the information and techniques presented in *Firebuilding*.

The boys can be tested on wood identification. This could either be distinguishing between different samples that the leader brings in, or the boys could gather a set number of different kinds of wood, identify them, and state what types of fire they are (or are not) useful for.

In addition, the same kinds of tests could be done for identifying tinder, kindling, and firewood.

The boys can also bring in fire starters they have made at home.

To test firebuilding skills, a good test is for the Pioneer to build a fire, boil water, and boil an egg in the water over the fire. The test in which the fire is to burn through a string set above the fire is NOT a useful test, since it requires only a short fire with high flames, which has little (if any) practical use.

A similar test is to have the Pioneers build a fire and make coffee for the leaders. This works great at campouts if you can get a different boy or group of boys to do this every morning!

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Figure 5-8

burn up, the logs are pushed toward the center.
The Lazy Man's fire works well with a small group, but for a large group of boys the Council fire provides a long evening of entertainment. As you can see in Figure 5-8, the Council fire is made of criss-crossed logs built over a Teepee fire. It gives off a great amount of heat and light.

The Keyhole fire is a good all around fire for any camp (see Figure 5-9). As the Teepee fire burns down to coals, they are pushed to the narrow end of the Keyhole and used to cook your meal. With more firewood placed on the Teepee fire, it will continue to keep you warm.



Figure 5-9

As we said at the beginning of this chapter, a fire can be a friend or a foe. By practicing what you have learned in this chapter, a fire will always be your friend.