

FIREWISE

Alaska

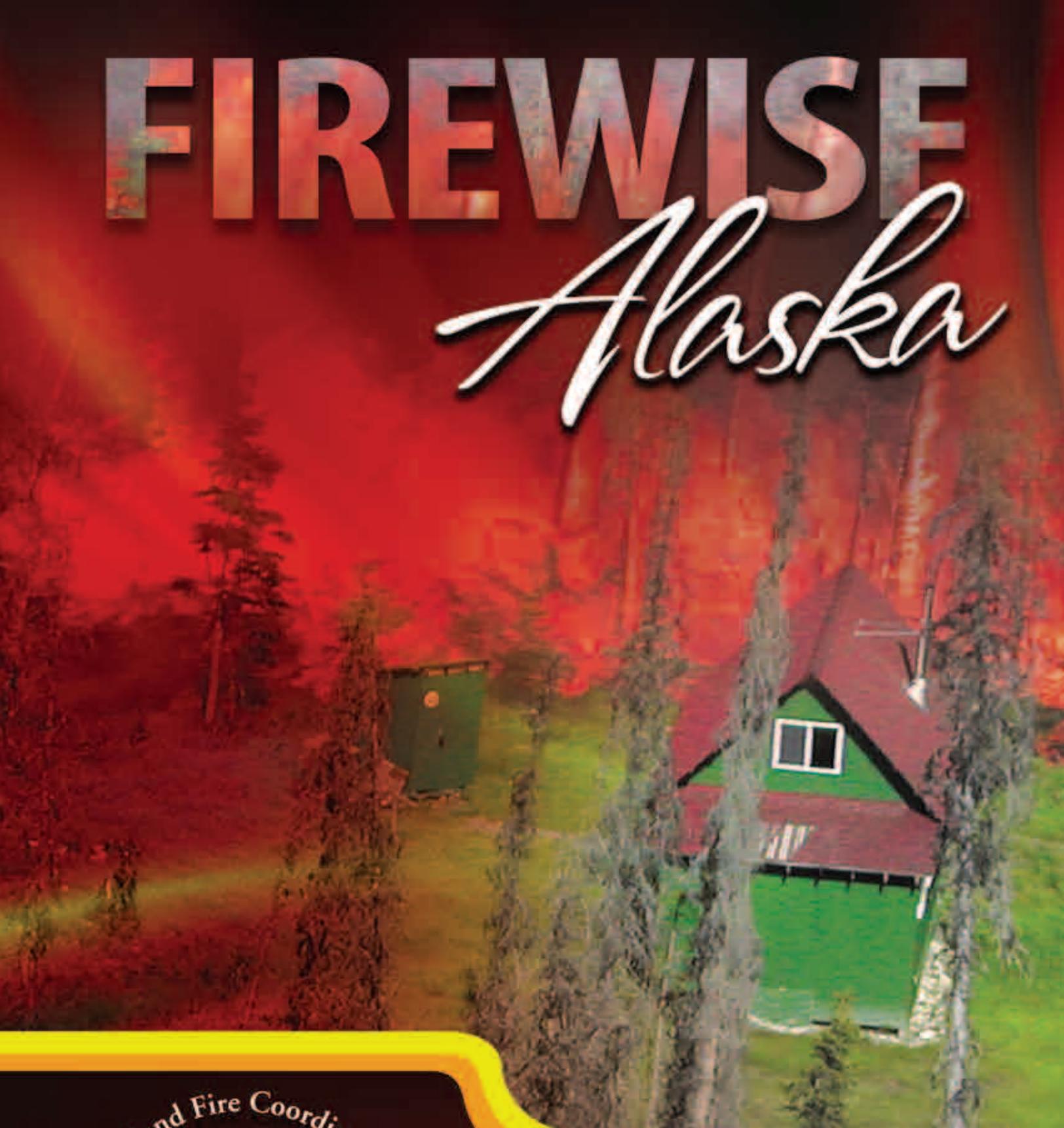




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Acknowledgments

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wildland
fires happen,
be ready.

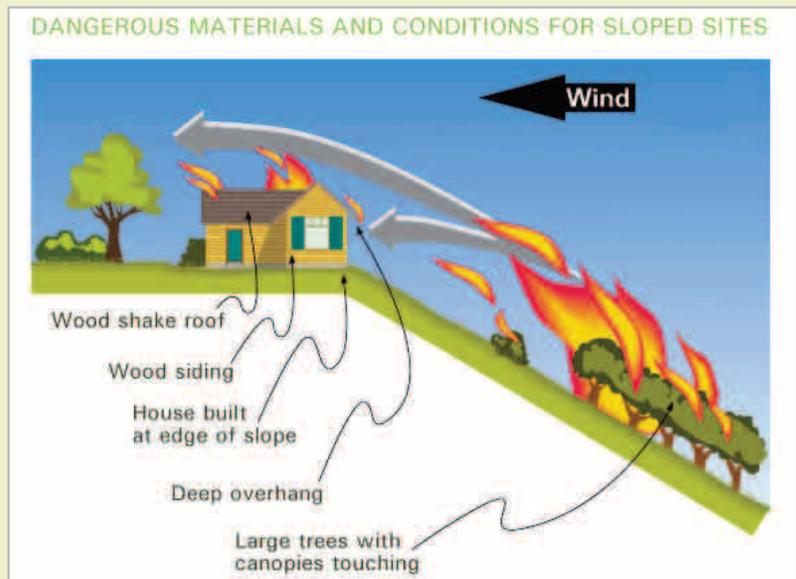
Living in the wildlands is a reality for Alaska residents. Bush, urban and suburban (road system) communities all coexist with the wildlife, the expansive landscapes and the exposure to all kinds of weather from hot summers to cold winters. It is our choice to live here with all the risks and consequences involved. People can live compatibly with wildland fire if they are aware of and prepared for local fire conditions. The more populated and closer a community is to

fire prone areas, the greater the need for a proactive approach and a community's involvement in fire risk reduction activities.

Fire plays an essential role in Alaska's wildlands. Fire plays an equally important social role in communities and rural lifestyles throughout the state, and helps to shape the wild and expansive habitats that Alaskans call home.

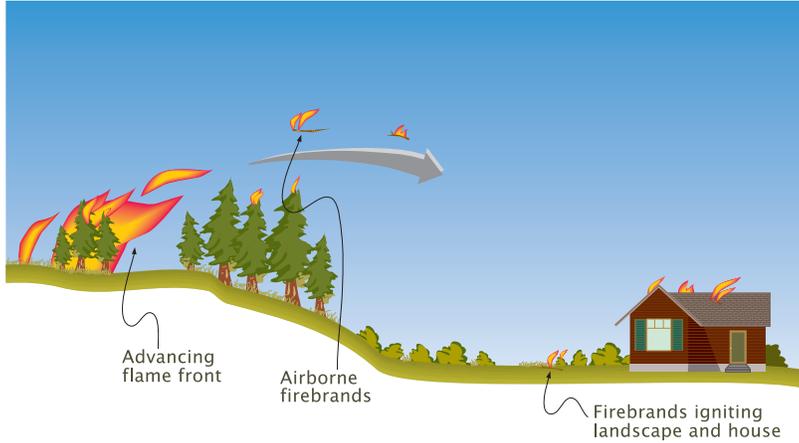
Homeowners can take effective measures to protect their homes and property. Adopting Firewise principles can reduce your risk of damage or loss to your property and community. This Firewise Alaska guide provides specific ways for you to protect your Alaska home from burning and how to create your family's safety plan.

It is vitally important for the homeowner to take effective measures that will help their property survive a wildland fire. When wildland fire strikes, firefighters must prioritize their efforts and may not reach every home. A Firewise home is more likely to survive a fire.



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FIRES ADVANCE BY DIRECT FLAME CONTACT AND BY AIRBORNE FIREBRANDS



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Fires advance by direct flame contact and by burning embers. Homes ignite in the same way:

- 1) direct flame contact with combustible materials on or adjacent to the home, and
- 2) burning embers landing on or near the home.

Your Firewise home has a good chance of surviving a wildland fire without firefighter assistance. It's important to remember that burning embers collecting on or near your home before and after the main fire passes can still lead to home loss if no one is there to put out these fires.



The Caribou Hills Fire of 2007 burned quickly through grass on the Kenai Peninsula.

Firewise Self Assessment Checklist

Within 15 feet of structure

- Remove all conifers and dry or dead vegetation
- Edge the building with small plants, flowers or gravel

From 15-30 feet of structure

- Thin or clump conifer trees to ~15 feet between extending branches
- Prune limbs of mature conifers to 6-8 feet
- Remove shrubs beneath trees
- Remove all dry or dead vegetation

From 30 - 100 feet of structure

(increase distance if slope is >30%)

- Thin conifers to 10 -15 feet between extending branches
- Thin black spruce in clusters <10 feet in diameter with 15 feet between clusters
- Prune limbs of remaining conifers to 6-8 feet
- Remove shrubs beneath trees
- Remove all dry or dead vegetation

General Landscaping

- Maintain lawn at 3" or less and keep well watered
- Keep trees healthy with frequent watering
- Dispose of flammable debris from your property
- Keep areas under stairs and decks free of debris; Enclose with non-combustible screens
- Clean the roof and gutters of needles, leaves, and branches
- Provide a 15 foot clearance between your chimney and nearest tree branches
- Prune trees in fall for best health - spruce bark beetle reference guide at www.fs.fed.us/r10/spf/fhp

Building Materials

- Cap chimney with spark arrester
- Roof should be fire resistant; If not, keep clear of leaves, mosses and lichens
- Screen all exterior vents, such as attic openings

Access and Signs

- Address marked with reflective numbers at least 4" high on house and driveway
- Clear vegetation alongside driveway and road edge
- Driveway should be 12 feet wide with a turnaround for emergency vehicle access

General

- Keep garden hoses and fire tools (shovels, rakes, or pulaskis) readily available
- If you have a well, consider installing a pump and generator
- Keep storage areas clean; Do not accumulate combustibles such as oily rags and newspapers
- Check spark arresters on all motorized equipment; Store 30 feet away from structures or inside garage

Hazardous Material

- Use non-combustible cribbing for fuel tanks with a 10 foot area cleared around the tank
- Stack firewood at least 30 feet from house and clear 10 feet around pile
- Do not stack firewood under trees or on downhill side of property

Fire Plan Inside

- Locate nearest fire station and post emergency numbers by several home telephones
- Test smoke and CO alarms monthly and change batteries twice a year; Keep fire extinguisher current
- Clean chimney and stovepipe regularly
- Identify emergency action plan for entire family & pets
- Identify Safety Zone where family meets in an emergency
- Prepare emergency supplies for transport (food, water, valuables and important documents)

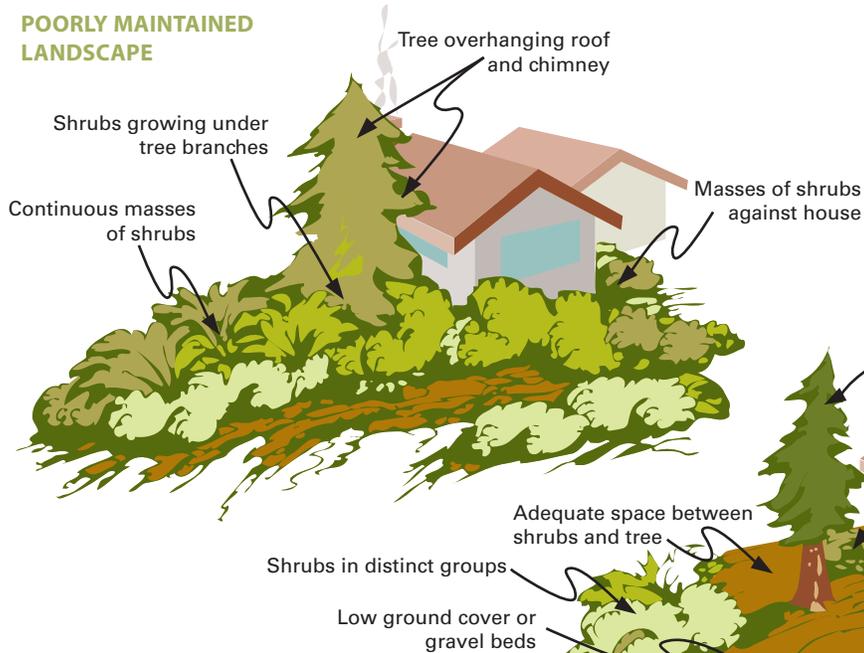
How Fast Can Your House Run?



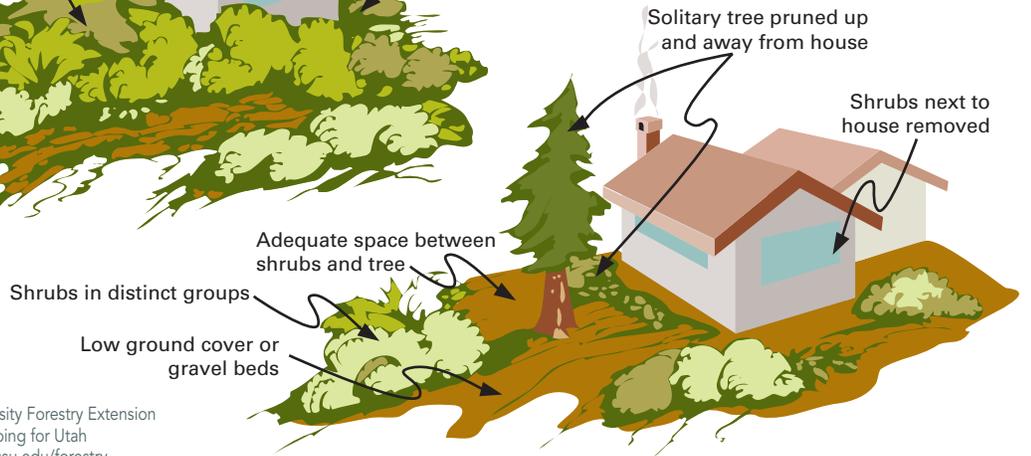


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POORLY MAINTAINED LANDSCAPE



WELL MAINTAINED LANDSCAPE



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Objective: Your home and other structures can survive a wildland fire without firefighter assistance.



Things can be safely stored under the decks only if kept clear of debris. A 3 foot gravel perimeter is recommended around the house.

A non-combustible roof protects your home from burning embers.

- Install a sprinkler system on the roof ridge during spring and summer if roof replacement to non-combustible material is not feasible.
- Keep your roof and gutters clean. Remove needles, leaves, lichens and branches.
- Prepare vent covers from plywood or other solid material to install when a wildfire approaches.
- Install gutter guards or covers.
- Ensure that chimney spark arrestor is securely attached and is made of wire mesh screen ($\leq 5/8$ inch).
- Cover attic and ridge vents with wire mesh screen ($1/8$ inch).

House siding responds to fire; it may burn from direct flame contact.

- Inspect foundation and flashing.
- Remove organic debris that collects in cracks.
- Caulk or cover gaps to reduce access for burning embers.

Windows will crack if wildfire is close.

- Screen all windows that open to prevent entry of burning embers.

Decks and stairs trap embers.

- Remove debris and combustible items from the deck surface and underneath decks and stairs.
- Maintain a non-combustible surface beneath the deck (ie. mineral soil or gravel).
- Enclose gaps and areas underneath your home and deck with fire-resistant materials, such as metal screening (mesh $1/8$ inch).
- Store firewood and tires at least 30 feet from the home.

A fire resistant perimeter around the home protects siding and decking from fire.

- Maintain a 3-foot gravel or other non-combustible perimeter around the home.
- Remove dense woody shrubs and needle-bearing trees.
- Use small flowers and shrubs to decorate (less than 18 inches tall). Keep well watered.

Embers collect in open garages and car ports.

- Seal gaps on garage doors with weather stripping.
- Enclose all vents with metal screening (mesh $1/8$ inch).
- Remove combustible fluids and debris from open carports.



A non-combustible perimeter helps keep the fire from igniting your home or cabin.





Rock gardens and small perennials are an attractive Firewise solution. Remove needle bearing trees within 15 feet of the home.

Wooden fencing leads fire to the home.

- Do not attach wood fences directly to the house. Replace attachment point with a metal gate or metal fence section.
- Maintain at least a 1 inch gap between the bottom of the fence and ground. Keep clear of debris, vegetation and firewood.

Sheds and outbuildings need the same Firewise treatment as the home.

- Maintain a non-combustible perimeter.
- Thin vegetation and prune trees near buildings.
- Keep dog houses free of straw during fire season.

Easy action items: Rake under decking and exterior stairs. Sweep leaves and needles off deck.

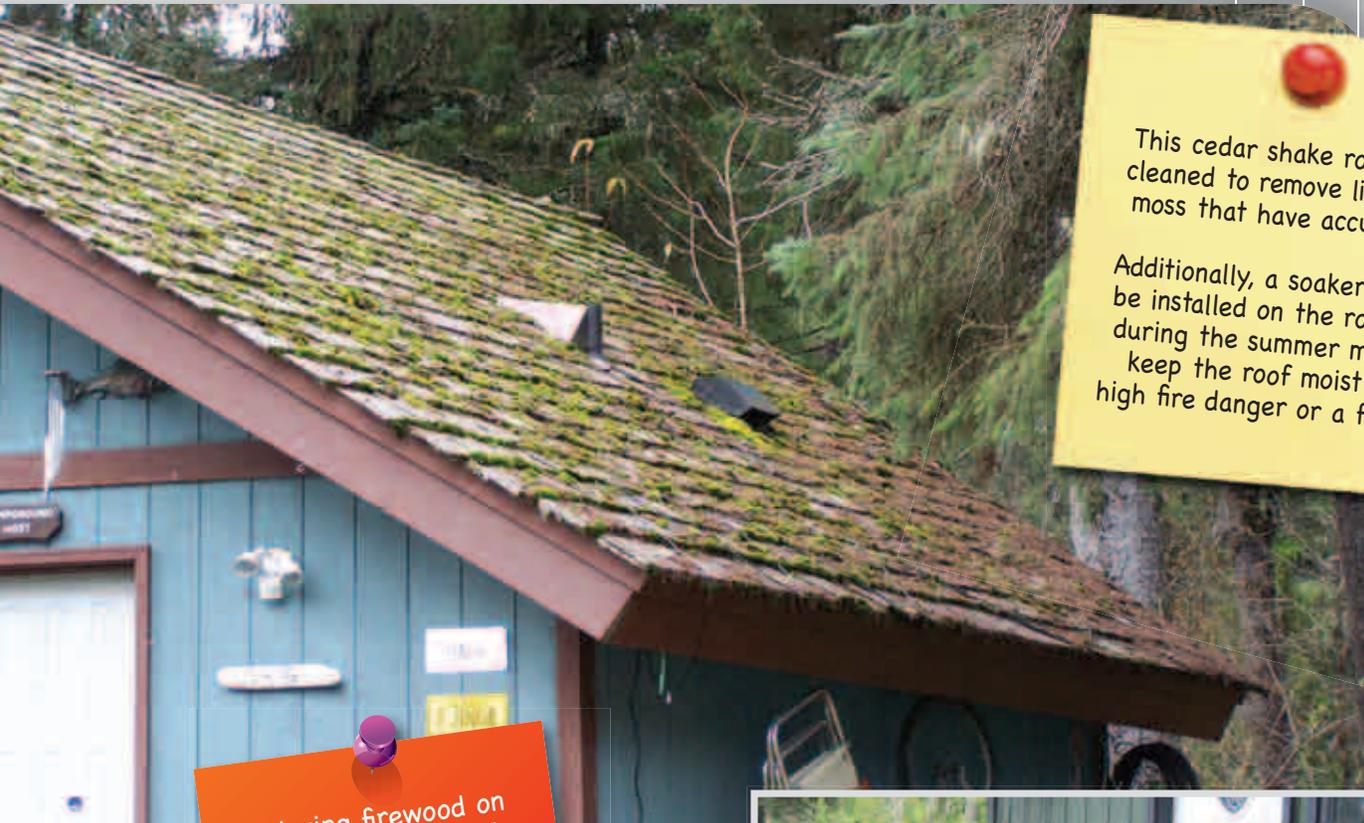
In one hour: Trim and water plants around the house.

Weekend project: Move the firewood off the deck, store >30 feet from the house.

Ladder Safety

- Ladders should be properly secured on level ground before you climb.
- Use the 4-to-1 rule for extension ladders: for each 4 feet of distance between the ground and the upper point of contact (such as the wall or roof), move the base of the ladder out 1 foot.

(<http://www.homesafetycouncil.org>)



This cedar shake roof can be cleaned to remove lichens and moss that have accumulated.

Additionally, a soaker hose can be installed on the roof's peak during the summer months to keep the roof moist during high fire danger or a fire event.

Storing firewood on or under your deck can lead to a home ignition.

Store firewood at least 30 feet away from your home.



Ready for a Retrofit?

Additional Firewise measures to take if you have the option to modify your home.

Roofing

- Install non-combustible roofing such as metal, asphalt shingles or fiber cement shakes.
- Enclose open roof eaves with heavy wood or cement soffit coverings.
- Locate soffit vents away from exterior walls and cover with nonflammable screen (mesh 1/8 inch).

Siding

- Use concrete, fiber cement, or metal siding.
- Use thick lumber, logs or heavy timbers if non-combustible siding is not feasible.
- Avoid vinyl siding, it may melt from the heat.

Windows

- Use triple or double pane windows.
- Use tempered safety glass for sliding glass doors and large picture windows.
- Use skylights with tempered glass.

Fencing

- Use lumber with fire retardant treatment or thicker dimension lumber >1 ½ inch. Consider using chain link fence.



Prioritize Firewise landscaping within the first 30 feet from your home.

- Maintain lawn at 3 inches and keep well watered.
- Separate vegetation with grass, rock gardens and gravel walkways.
- Cut or prune needle-bearing trees (spruce, hemlock, pine, etc.) adjacent to the home to maintain 15 feet of clearance between tree branches and the roof line.
- Thin needle-bearing trees to 15 feet between extending branches.
- Prune tree branches up 6-8 feet from the ground.
- Remove shrubs and mow grass under trees.
- Remove dead vegetation.
- Use Firewise plants, prune often and keep well watered.
- Separate groups of shrubs by 10 feet.
- Remove all wood and bark mulch from this area.
- Water trees frequently. Watering at the drip line is most effective: the outer circumference of the tree branches.
- Store firewood and tires ≥ 30 feet from the home, and at least 10 feet from a wood fence.

Make the most of your efforts by starting at the house.

Thin and prune trees, one section at a time.

Separate islands of vegetation.

Objective:

A lean, clean and green landscape will slow fire's spread.



Beyond 30 feet from your home, a healthy forest comprised of both birch and spruce can be maintained through regular pruning of branches, trimming shrubs and mowing grass beneath trees.

Prune trees in fall months.

- Prune spruce trees in fall to limit bark beetle activity.
- All pruning should be done in late fall or cold months to maintain good tree health.
- No pruning in the spring when trees are budding.

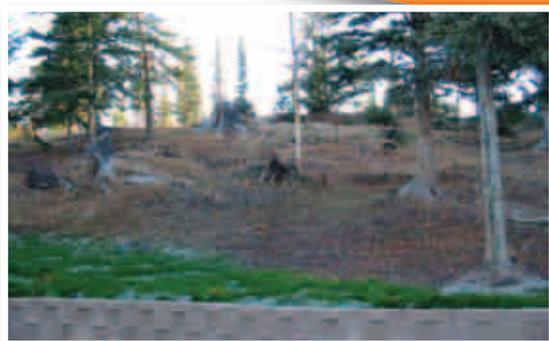
Easy action items:
 Prune a tree
 Water plants

In one hour:
 Rake around the wood pile
 Rake under trees
 Rake under the deck and exterior stairs

Weekend project:
 Pile tree limbs and brush >30 feet from the house for fall burning or composting.

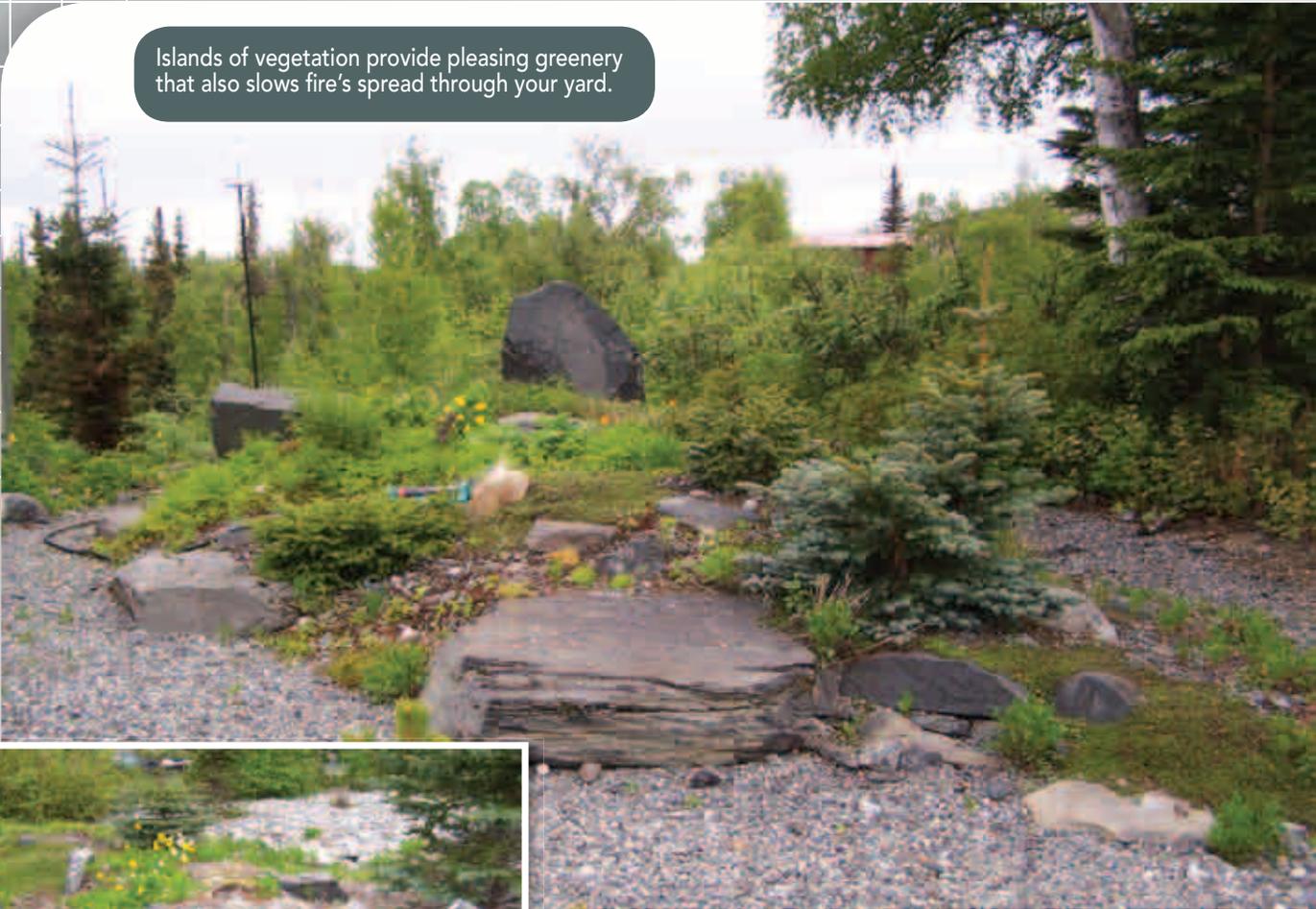
Treat vegetation between 30 to 100 feet from your home (increase the distance if slope exceeds 30%).

- Thin needle-bearing trees to 15 feet between extending branches.
- Thin black spruce in clusters (<10 feet in diameter) with 15 feet between clusters.
- Prune tree branches up 6-8 feet from the ground.
- Remove shrubs and mow grass under trees.
- Remove dead vegetation.



Defensible space is an area that will help protect your home and provide a safety zone for those who are battling the flames.

Islands of vegetation provide pleasing greenery that also slows fire's spread through your yard.



General Landscaping

- In heavily wooded areas on your property, thin and prune trees to decrease the fire hazard and improve growing conditions. Remove dead, weak, or diseased trees, leaving a healthy mixture of older and younger trees.
- Reduce fire risk by emphasizing hardwood trees, either mixed with conifers or as pure stands near your home.
- Gravel or stone walkways serve as fire breaks around your home.
- Work together with your neighbors to treat common areas between houses: thin and prune trees, mow grass.
- Trim shrubs and mow grass in easements surrounding electrical power lines.
- Avoid planting trees near overhead power lines where they may grow into and contact the lines under windy conditions, causing a fire. Contact your local utility with questions.
- Consult a tree care professional with your questions. Visit <http://www.forestry.alaska.gov/community/>.

WOOD STORAGE TIPS

Store wood piles at least 30 feet from any structure and clear 10 feet around pile.

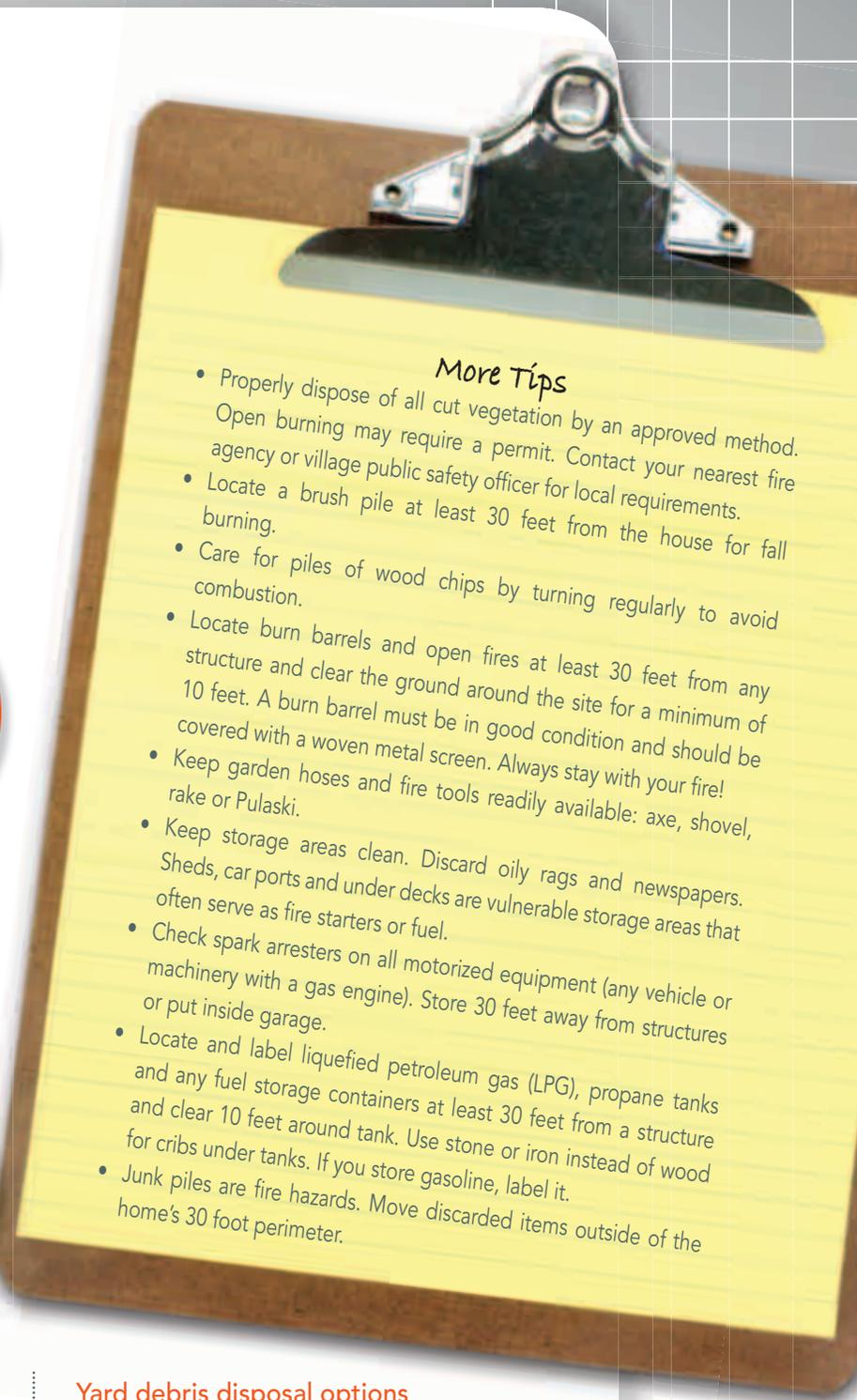
Many homes have survived as a fire moved past, only to burn later from a woodpile that ignited after the firefighters moved on to protect other homes.

Do not stack firewood under trees or on downhill side of home.



Firewise plants are fire resistant, not fire proof.

- High water content and supple, moist leaves.
- Little or no accumulation of dead vegetation, either on the ground or on the plant.
- Sap that is water-like such as that found in birch trees.



More Tips

- Properly dispose of all cut vegetation by an approved method. Open burning may require a permit. Contact your nearest fire agency or village public safety officer for local requirements.
- Locate a brush pile at least 30 feet from the house for fall burning.
- Care for piles of wood chips by turning regularly to avoid combustion.
- Locate burn barrels and open fires at least 30 feet from any structure and clear the ground around the site for a minimum of 10 feet. A burn barrel must be in good condition and should be covered with a woven metal screen. Always stay with your fire!
- Keep garden hoses and fire tools readily available: axe, shovel, rake or Pulaski.
- Keep storage areas clean. Discard oily rags and newspapers. Sheds, car ports and under decks are vulnerable storage areas that often serve as fire starters or fuel.
- Check spark arresters on all motorized equipment (any vehicle or machinery with a gas engine). Store 30 feet away from structures or put inside garage.
- Locate and label liquefied petroleum gas (LPG), propane tanks and any fuel storage containers at least 30 feet from a structure and clear 10 feet around tank. Use stone or iron instead of wood for cribs under tanks. If you store gasoline, label it.
- Junk piles are fire hazards. Move discarded items outside of the home's 30 foot perimeter.

Yard debris disposal options

- Chip branches, use as mulch around trees outside of the home's 30 foot perimeter.
- Compost grass and fine woody debris (visit the online publications database at UAF Cooperative Extension Service <http://www.uaf.edu/ces/>.)
- Haul to landfill.