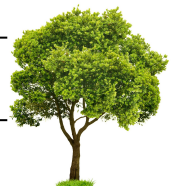


Hazard Reduction for Arborists and Landscapers



Reduction Saves Lives and Homes

What is Firewise landscaping?

Firewise landscaping is a way of designing and maintaining a home’s yard that gives a building the best chance of survival during a wildfire. Firewise landscaping is a global phenomenon that is **based on science and observations** of past fires and is proven to be effective in **reducing wildfire risk** for residents. As an arborist or landscaper, you play an important role in creating **safety in the community**. Incorporating these core wildfire risk reduction concepts highlighted here will add fire protection value to your vegetation management services.

Why should I incorporate this into my work?

A Firewise or fire-resistant landscape around a home that is **well-designed and well-maintained** can make the difference between a simply close call and a burned home during a wildfire. On average, fires in Hawai'i burn as much land each year (proportional to the size of the state) as the most fire-prone states on the mainland. Along with destroying Hawaii’s native forests and impacting coral reef health from post-fire erosion, wildfires endanger lives and property. In 2018, a wildfire in West Maui burned 30 homes — homes that were surrounded by flammable vegetation. By incorporating Firewise practices, you will not only **increase your business opportunities**, but also **protect Hawaii’s communities and natural resources from wildfire**.

Core Concepts for Hazard Reduction

Be Ember Aware

Most homes that burn down during wildfires are from embers produced by nearby burning vegetation or structures. The more you can do to keep plants, especially shrubs and trees, from igniting near a home, the better.

Create Defensible Space

Defensible space is the required space between structures and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It can protect the home from igniting due to direct flame or radiant heat and provide access for firefighters to defend the structure and put out the fire. Defensible space is essential for structure survivability during wildfire conditions.

LEAN
CLEAN
GREEN

The plants around a home can act as fuel during a wildfire.

To reduce vegetative hazards, limit the amount of flammable vegetation (lean), remove dead or dry flammable debris (clean), and create a well-irrigated greenbelt using mostly, if not all, native or drought tolerant vegetation (green).

Home Ignition Zones (HIZ)

There are two zones in the HIZ:

ZONE 1: 30 feet out from all structures

ZONE 2: 30 to 100 feet out from all structures (or up to the property line)

Essentially, you want to put the most effort closest to the home and work your way out.



This fact sheet brought to you by:
Hawai'i Wildfire Management Organization,
a 501(c)3 non-profit that has been providing the Hawaiian Islands with nationally recognized wildfire protection services since 2000.

Flip the page for tips and tricks



Wildfire Hazard Reduction Strategies



Focus On: Vulnerable Areas



The **roof** is the most vulnerable part of the home to ignition. Trim tree branches to keep a minimum of 10 feet from structures.



Windows are weak spots as heat from plants nearby can cause them to shatter. Keep plant growth away from windows as much as possible.



The Fire-Free Zone: the first 5-10 feet around a home should have very little to no flammable materials. The most optimal surfacing in this zone is paving, gravel, cinder, or other non-combustible materials.



Utilize existing **"hardscaped"** areas such as driveways, walkways, patios, water features, and boulders as ways to break up the continuity of fuels.



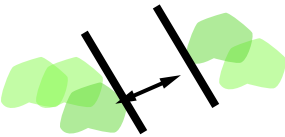
Combustible **fencing** can become engulfed and if attached to the home's siding can carry the fire right to the structure. Keep vegetation trimmed low and away from fences.

Focus On: Plant Spacing



Vertical Spacing

Ladder Fuels, or low-level vegetation that allows the fire to spread from the ground to the tree canopy, should be removed. Create at least 10 feet of separation between low-level vegetation and tree branches. This can be done by reducing the height of low-level vegetation and/or trimming lower tree branches.



Horizontal Spacing

Prevent horizontal wildfire spread by spacing **lateral fuels**, or vegetation that are connected horizontally, farther apart and into clusters or islands. The minimum spacing between clusters of vegetation is **3 times** the height of the tallest plants. Clusters of vegetation should also be kept as far away from structures, as possible.

Focus On: Wiser Plant Choices



'Ilima papa

Firewise landscaping is about having the **right plants in the right place**. Non-native, lush plants often drop hazardous debris and can become fire-prone in drought conditions. For drier areas of Hawai'i, consider using native dryland plants that are specially adapted to local conditions and require less upkeep, water, and fire maintenance, saving yourself a great deal of time, money and resources. Check out a list of recommended Firewise plants in the "Ready, Set, Go! Hawai'i Guide" on our website's "HWMO Products" page: hawaiiwildfire.org/hwmo-products.

Focus On: Keeping a Good Maintenance Schedule



Regular maintenance is a key function of long-term wildfire risk reduction — this aside from promoting plant health, improving aesthetics, and other benefits of a well-mapped-out plant maintenance schedule.

How will this help my business?

- Add value to your services
- Recognition that you care for the safety of the community
- Stand out from the competition
- More business opportunities (year-round fire season in Hawai'i)

Thank you for helping us protect people and their homes from wildfire!

For more information and resources:

HawaiiWildfire.org

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Some information based on Texas A&M Forest Service information from a 2014 presentation.