



BRITISH COLUMBIA
FireSmart



Agenda

- How Does Fire Behave?
- Gulf Island Fire Risk?
- How Do Firefighters Fight Wildfires?
- What's FireSmart?
- What Else Can I Do?

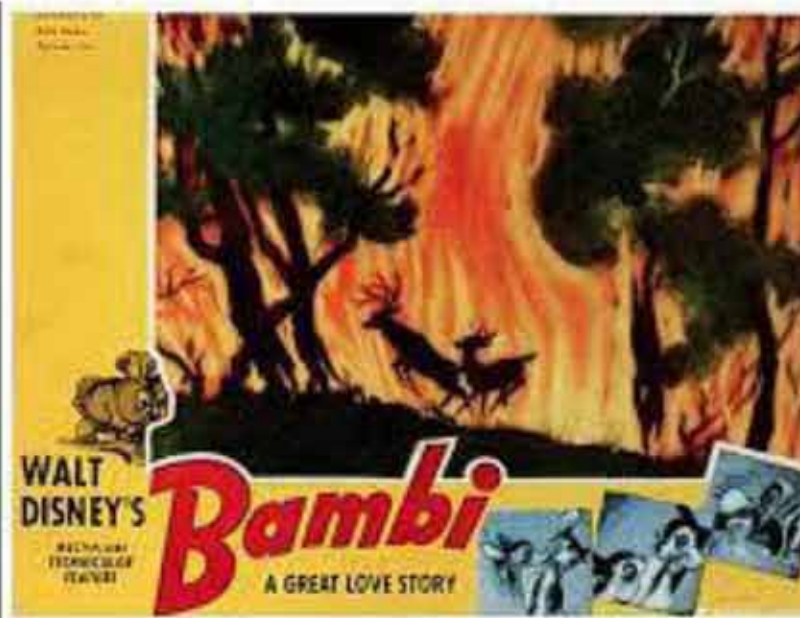
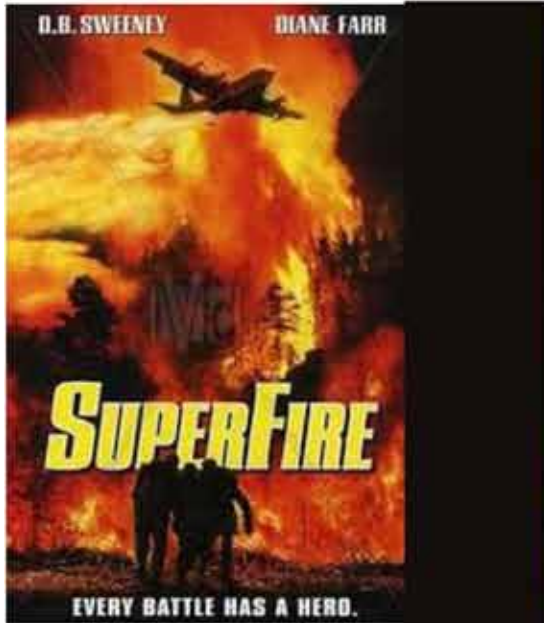


Forests are a Fire Environment



Eventually, all forests are subject to fire

How does wildfire behave?



It's not like the movies

How does wildfire behave?



Wildfire is part of the natural cycle

How does wildfire behave?



Firebrands or embers can be cast kilometers ahead of a fire front and typically ignite the roof or decking of structures

How does wildfire behave?



Kindling (like leaves and needles) are needed to get started, just like your campfire

How does wildfire behave?



Fire follows the path of least resistance - whatever it is.

Coastal Douglas Fir: Fire-Resistive Ecosystem



Fir trees with their thick bark and self-pruning lower limbs have evolved to be fire resistant

Wildfire on Coastal B.C.?



***However, fire does happen.
Often starting in cut blocks, then slowing or
stopping once they reach a healthy forest.***

Wildfire on the Gulf Islands?



These images from Salt Spring Island and Galiano Island

How Do Firefighters Fight Wildfires?



***No amount of manpower and equipment
can extinguish a big fire***

How Do Firefighters Fight Wildfires?



***However, they can sometimes be managed. Two of the techniques used are: 1. Making a firebreak (bulldozer), and burning back toward the fire front.
2. Using sprinklers to wet down a structure.***

So what can we do?



Fire scientists have studied why some houses survive while their neighbours are burned to the ground.

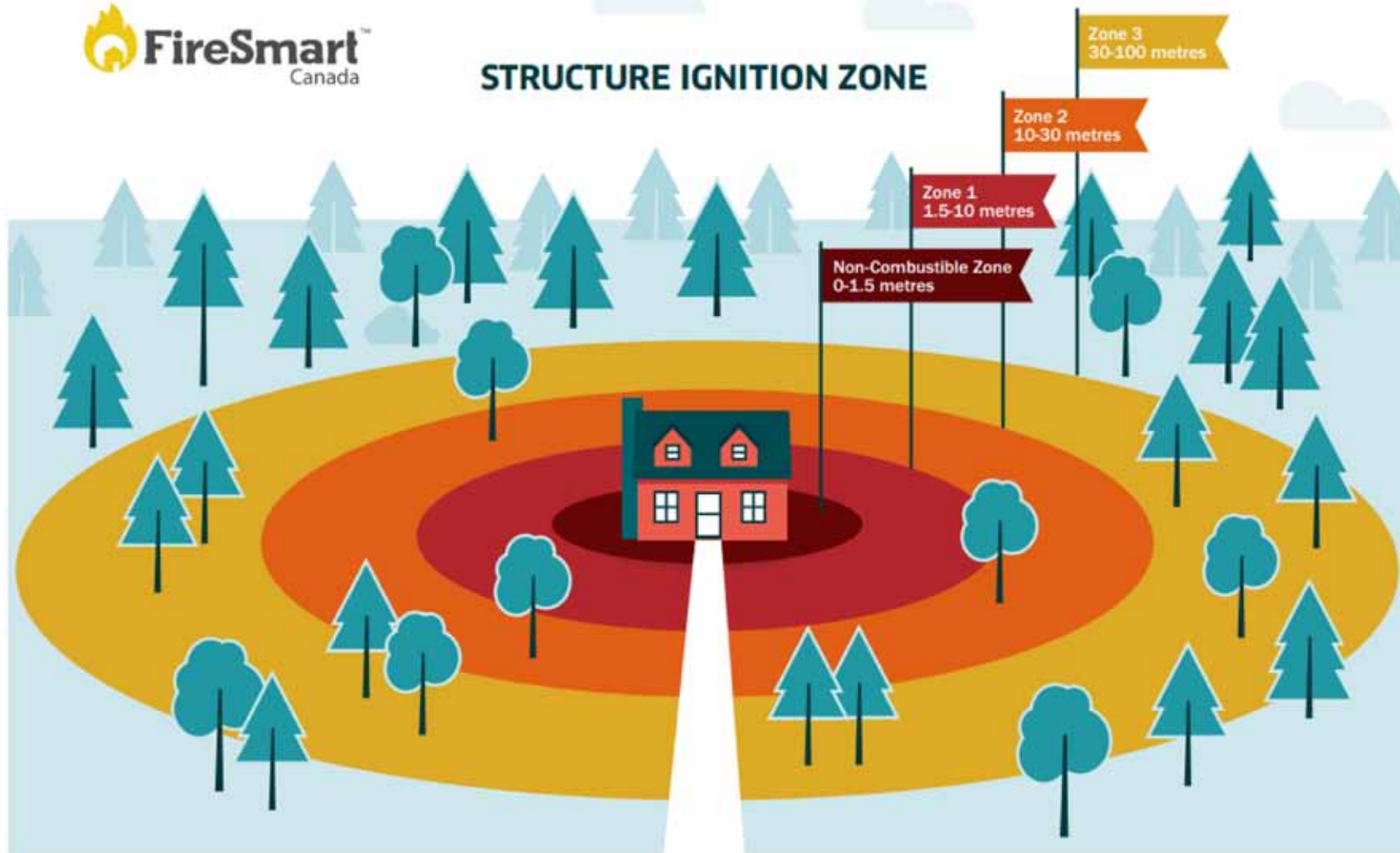
FireSmart - living with wildfire

- FireSmart - Canadian (international) standard
- Evolved over 40 years
- Backed by vast field, laboratory and modelling research
- Reduced losses, even under extreme fire conditions.



***The culmination of this study in Canada
is delivered to the public via FireSmart***

STRUCTURE IGNITION ZONE



***Directly beside your structure
is where you need to be most diligent***

Zone 1A

- **The most critical zone (0 to 1.5 metres from the home)**
- Remove combustible material right down to the mineral soil
- Use non-flammable materials such as gravel, brick or concrete in this critical area adjacent to your home
- Avoid having woody shrubs, trees or tree branches in this zone



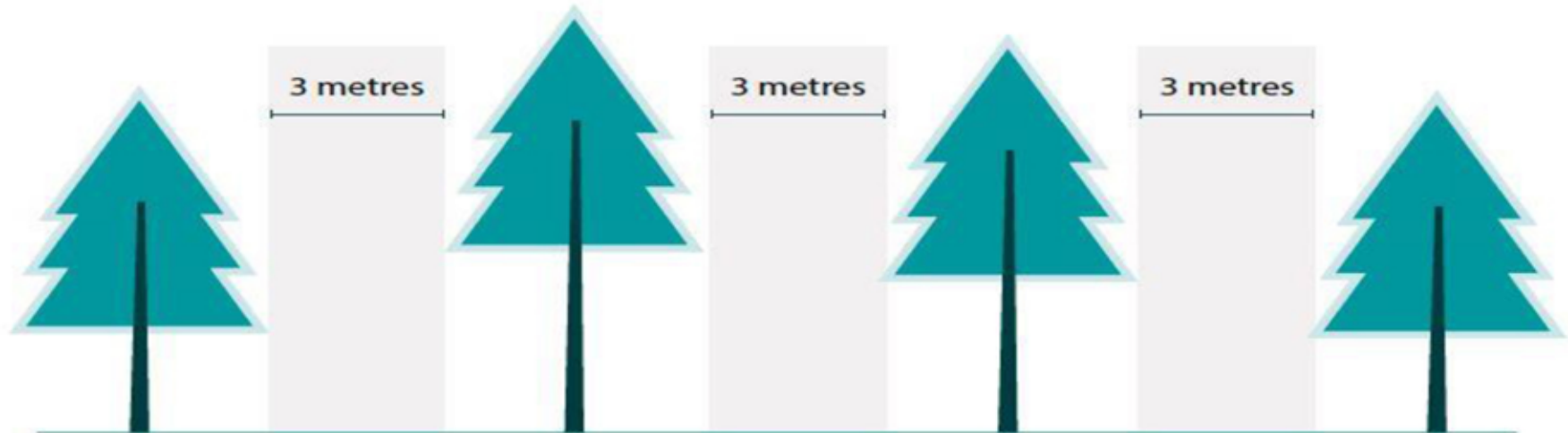
Zone 1 - 1.5 to 10 metres

- Plant low-density, fire-resistant plants and shrubs.
- Remove, reduce, replace coniferous trees and shrubs (cones and needles)
- Mow lawns.
- Relocate firewood piles, construction materials, storage sheds and other combustible structures to Zone 2.



Zone 2

- 10 to 30 metres from home
- Prune, thin and space coniferous trees to create at least 3 metres of horizontal space between single or grouped tree crowns.
- Prune coniferous trees, to remove branches below 2 metres.
- Collect fallen branches, dry grass and needles to reduce fuels.



Zone 3

- **30 to 100 metres from home**
- Reduce risk of high-intensity crown fires.
- Main priority - fuel reduction and conversion (rather than removal)
- Create fire breaks by creating space between coniferous trees and other flammable vegetation.



What's a FireSmart garden?



***There are many different approaches possible.
Look to native plants first.***

What's a FireSmart garden?



No Broom or Gorse Please

***Invasive broom and gorse are highly flammable,
and should be removed.***

What's a FireSmart garden?



Have a non-combustible zone up against your structures

What's a FireSmart garden?



Deciduous vs Coniferous

Deciduous trees are more fire resistant than conifers

What's a FireSmart garden?



Native plants and trees, including mature Douglas Fir, Arbutus, Ferns, Salal and Oregon Grape, are inherently fire resistant.

What's a FireSmart garden?



Xeriscaping can work well





COMPOST OR MULCH

***Compost is not flammable. Wood chip mulch IS flammable.
Keep flammable mulch far away from structures.***

What's FireSmart? - Home Maintenance



Gable Vents



***Embers can ignite leaves in gutters and get inside attic vents.
Vents should be covered with fine metal mesh
to prevent embers from entering.***

Open Burning as Fire Risk



Most wildfires are initiated by open fires which get out of control.

Alternatives to Burning?



Branches in contact with the ground will decompose much faster than if they are off the ground. Making berms with branches and lots of dirt can help to safely dispose of woody waste and capture moisture.

What Else Can I Do? - Sprinklers



Some homeowners elect to install sprinklers, permanently or seasonally.

What Else Can I Do? - Community

WILDFIRE COMMUNITY PREPAREDNESS DAY

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***Team up with your neighbours
to improve the fire resiliency of your area.***