

A person is walking a dog through a misty forest. The person is wearing a dark jacket and is walking away from the camera. The dog is a small, light-colored dog. The forest is filled with tall, thin trees and dense undergrowth. The mist is thick and white, creating a hazy atmosphere. The overall scene is peaceful and serene.

People, fire and landscapes

Clay Trauernicht, PhD
Extension Fire Specialist
Dept. of Natural Resources and Environmental Management
College of Tropical Agriculture and Human Resources
University of Hawaii













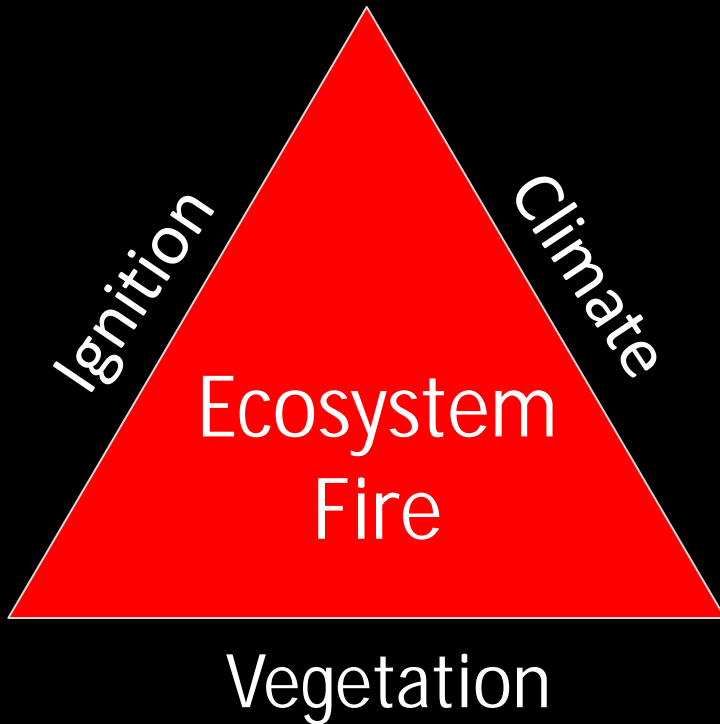




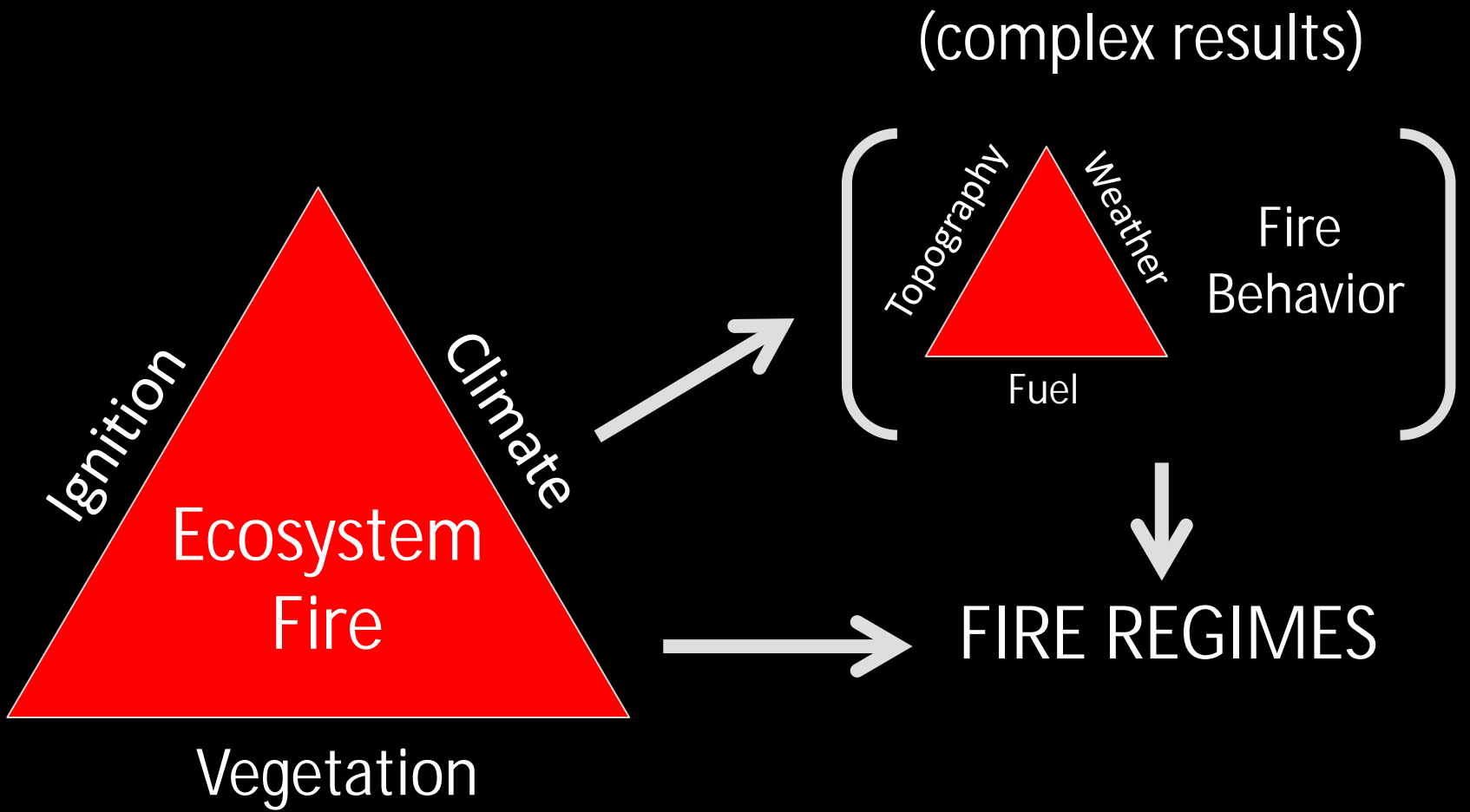


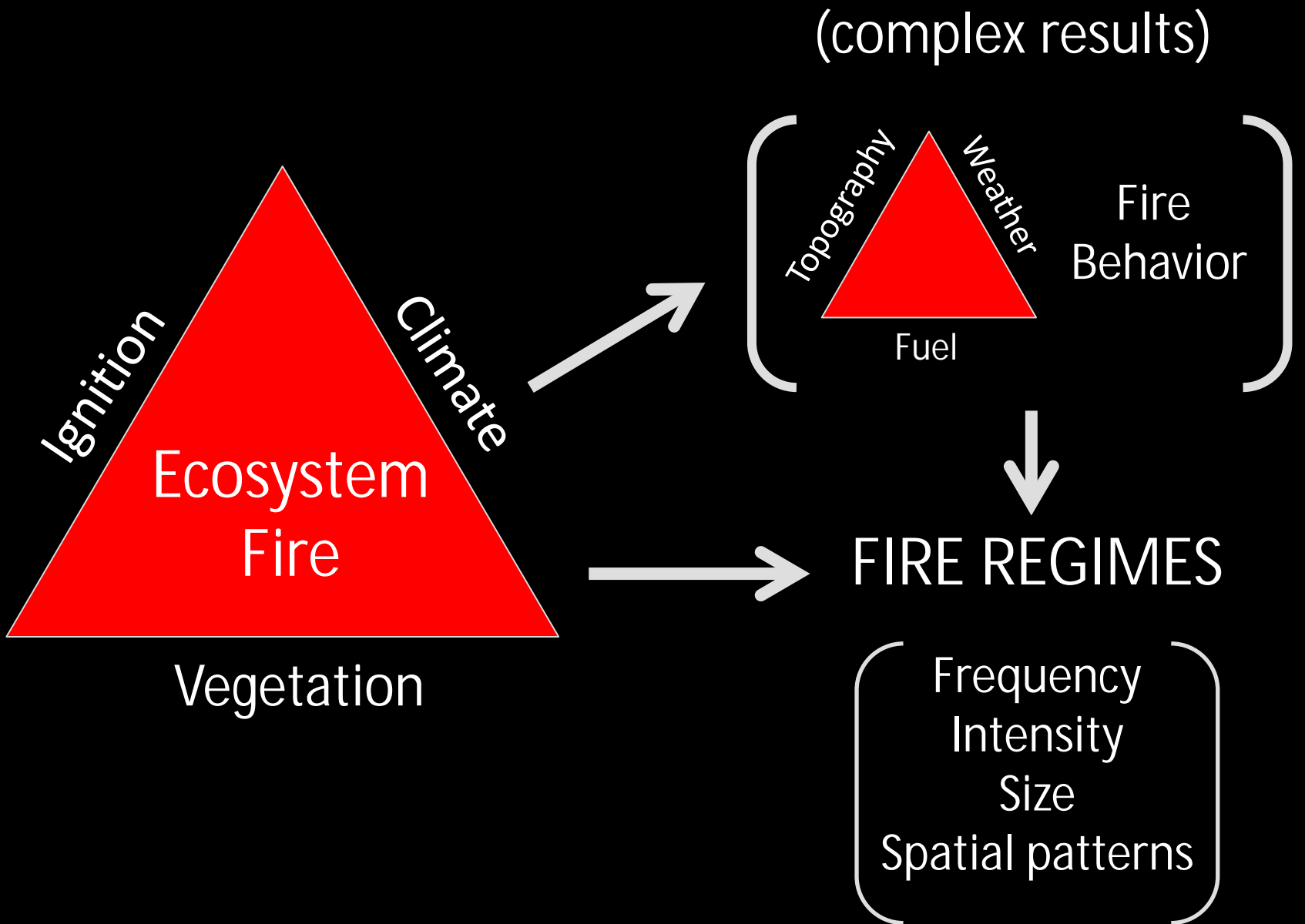
Jul 2002

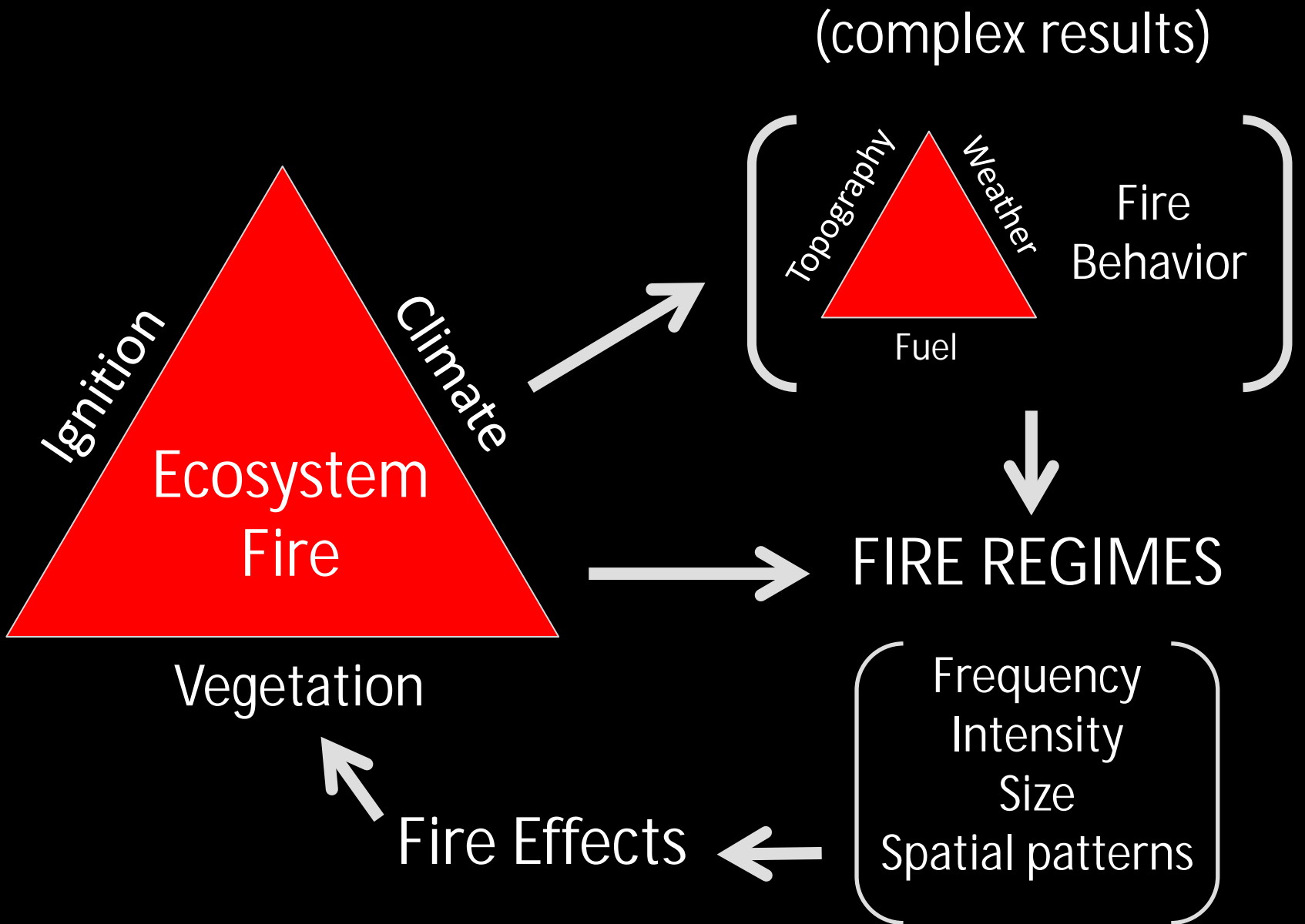
Wildfire Science on a single slide?



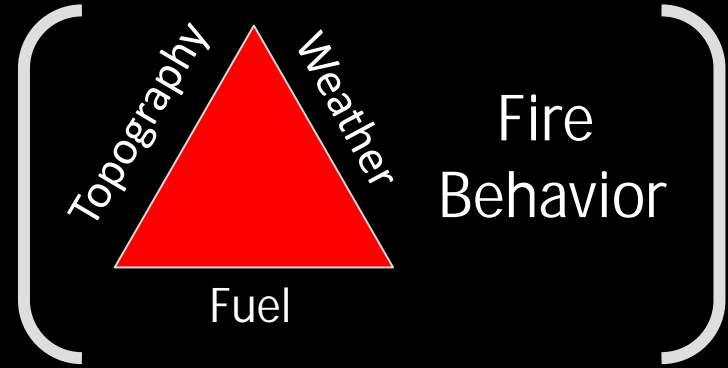
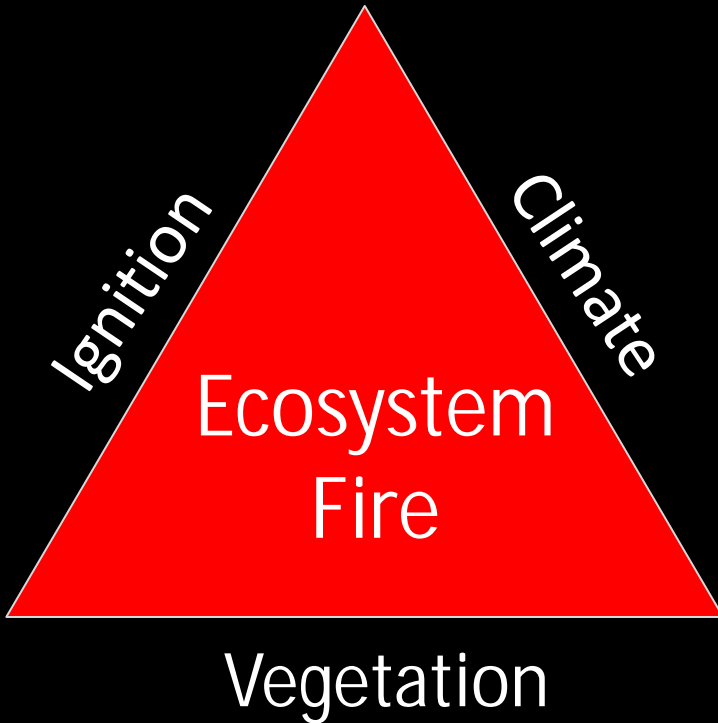
(a simple recipe)







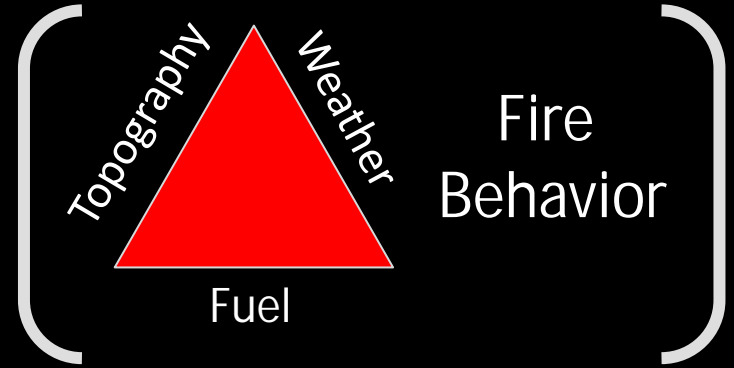
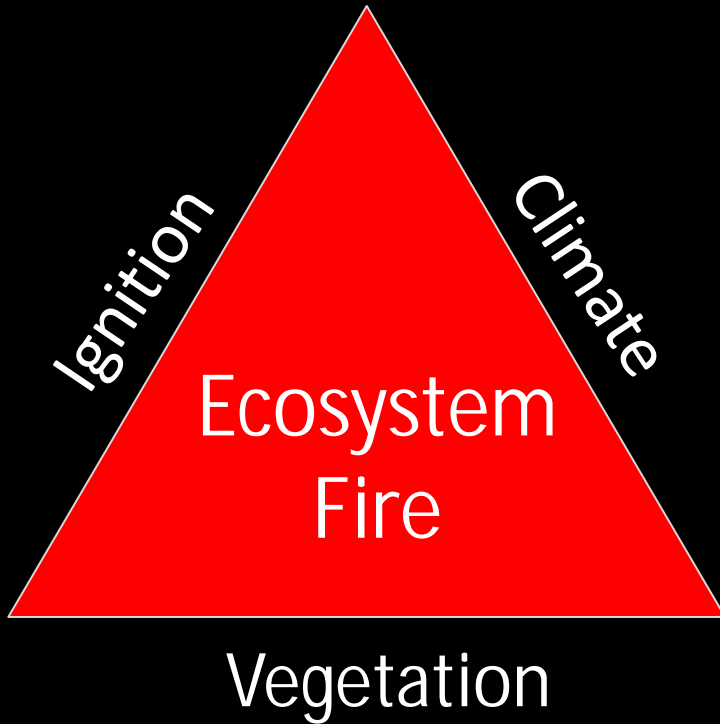
What can we manage?



FIRE REGIMES

Frequency
Intensity
Size
Spatial patterns

What can we manage?



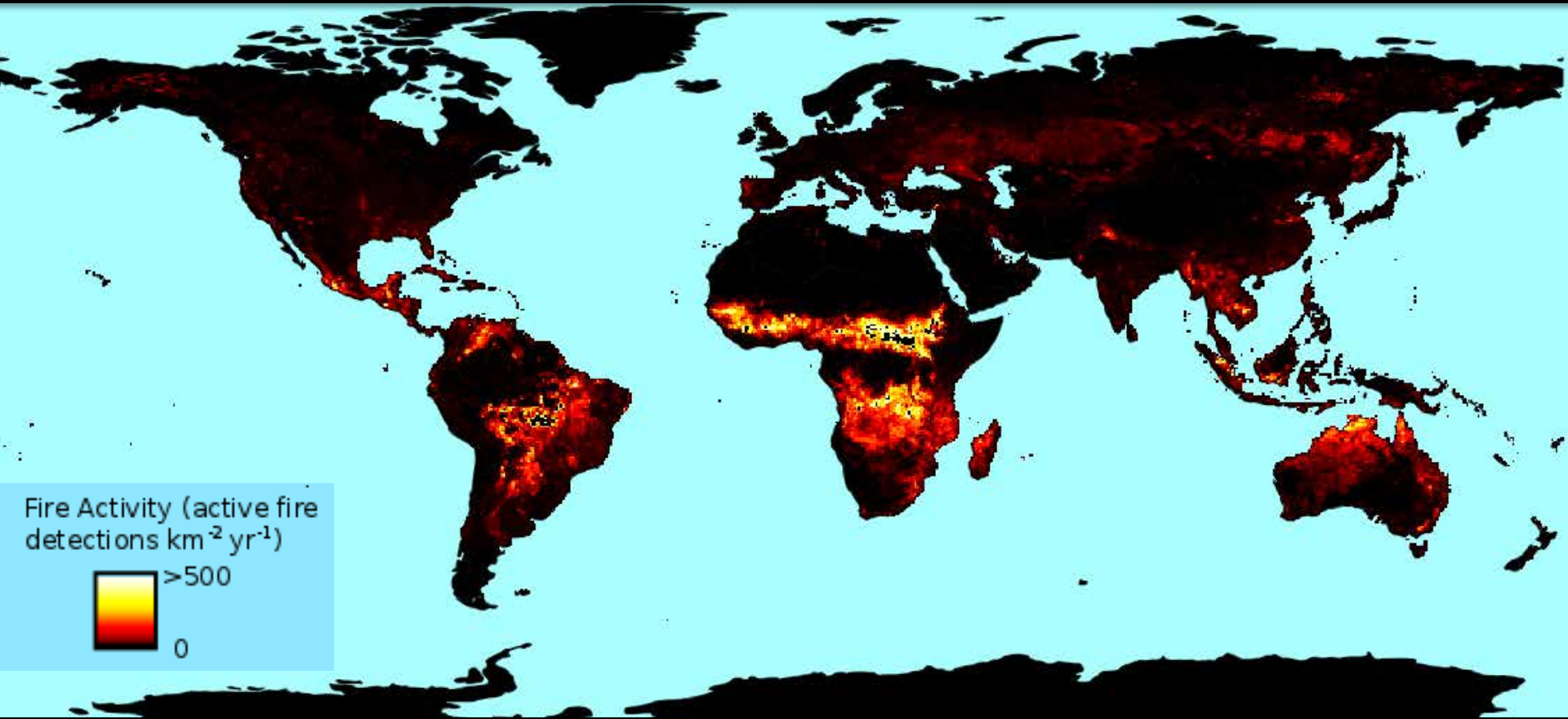
FIRE REGIMES

Frequency
Intensity
Size
Spatial patterns

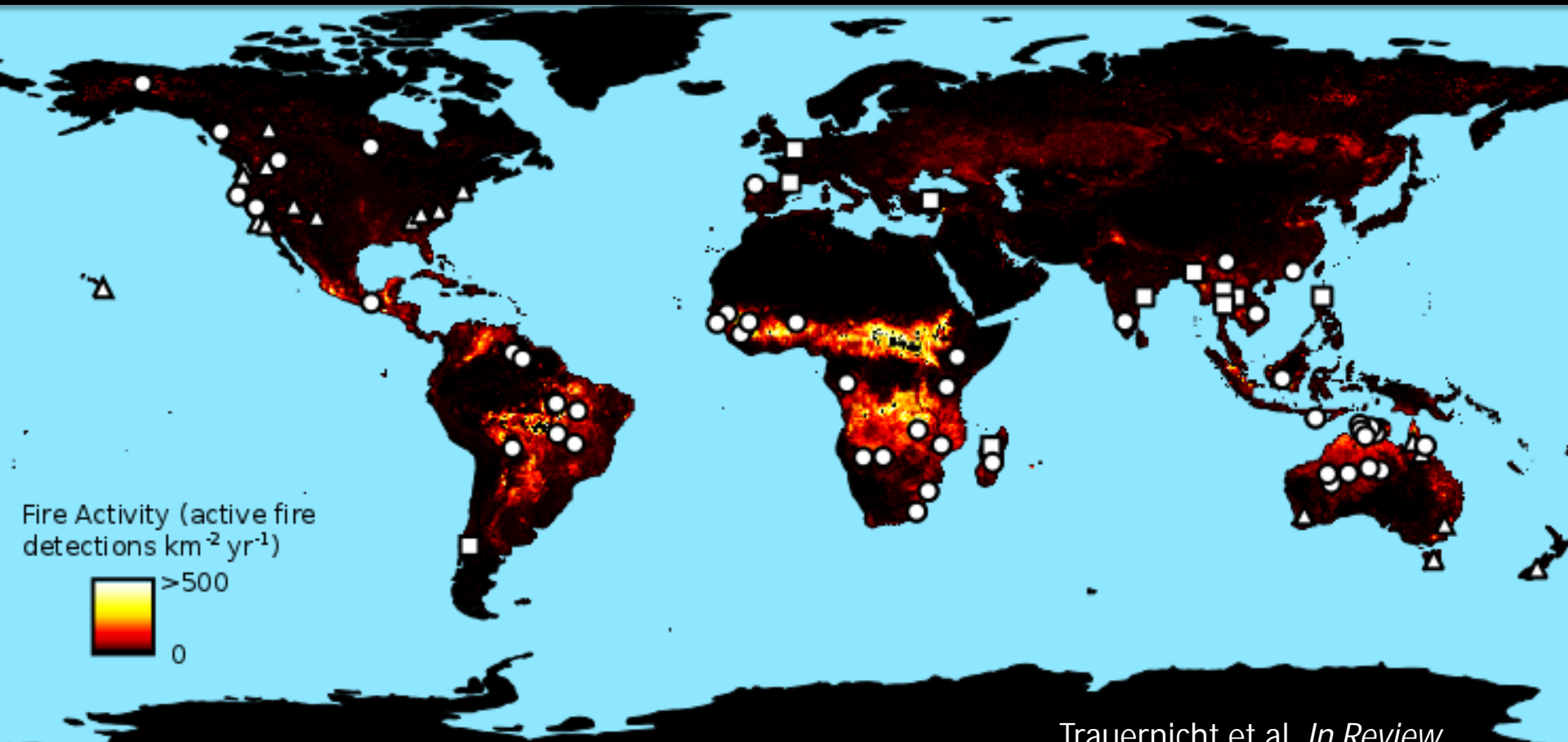
And to what effect?



Living with fire via suppression?



Living with fire via management?



Trauernicht et al. *In Review*



'fire is for kangaroos'

Pest management
Woodland management
Manipulate plant traits
Attracting game
NTFP harvest
Cleaning landscapes
Driving game
Cultivation
Prevent destructive fires
Pasture management
Animal safety
Ownership/responsibility

Warfare/conflict
Firewood
Fishing
Communication
Animal gathering
Ceremonial/medicinal

Pest management
Woodland management
Manipulate plant traits
Attracting game
NTFP harvest
Cleaning landscapes
Driving game
Warfare / conflict
Firewood
Fishing
Communication
Animal gathering
Prevent destructive fires
Pasture management
Animal safety
Ceremonial/medicinal
Ownership/responsibility
Cultivation



a) Pre-human Fire Regime



b) Aboriginal Fire Regime



c) European Fire Regime

Time period since last fire



Long



Medium



Short

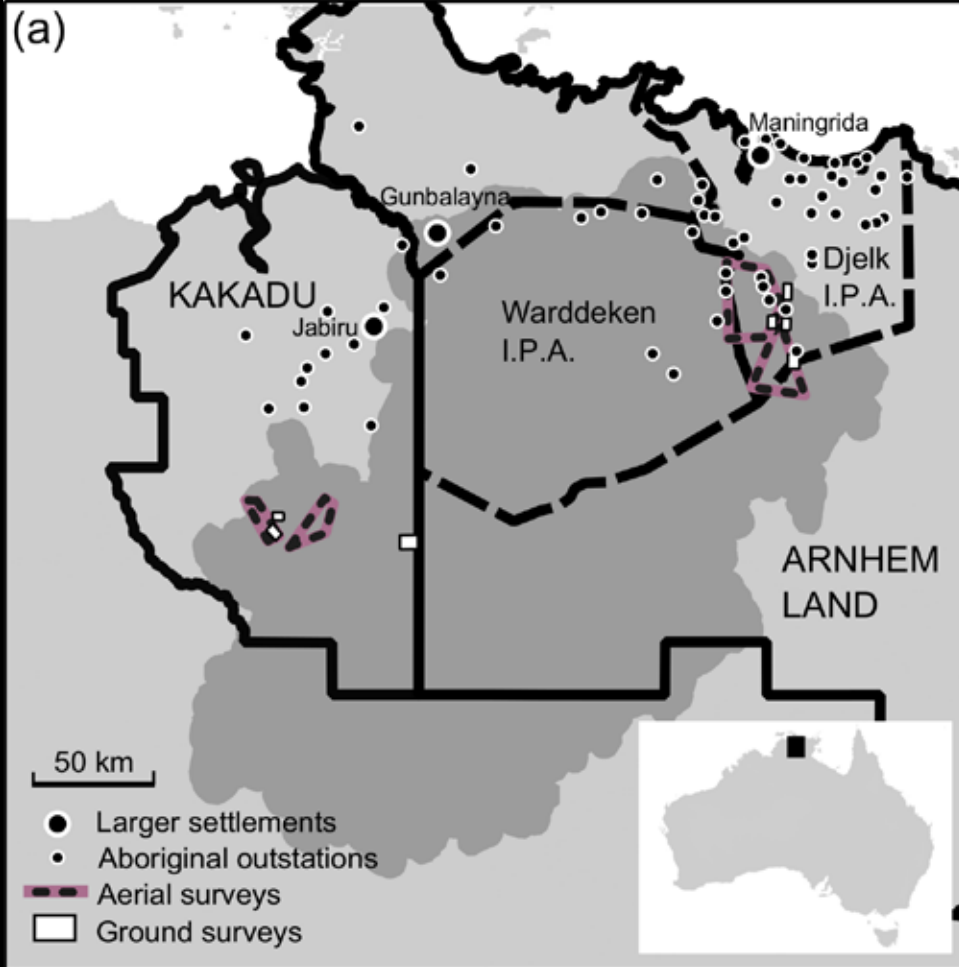
'the patch mosaic'



Callitris grove



Aboriginal country vs. a modern wilderness





Intact groves





Degraded groves



Managed landscapes

- ê fire intensity
- é patchiness
- é plant diversity



Another modern wilderness?



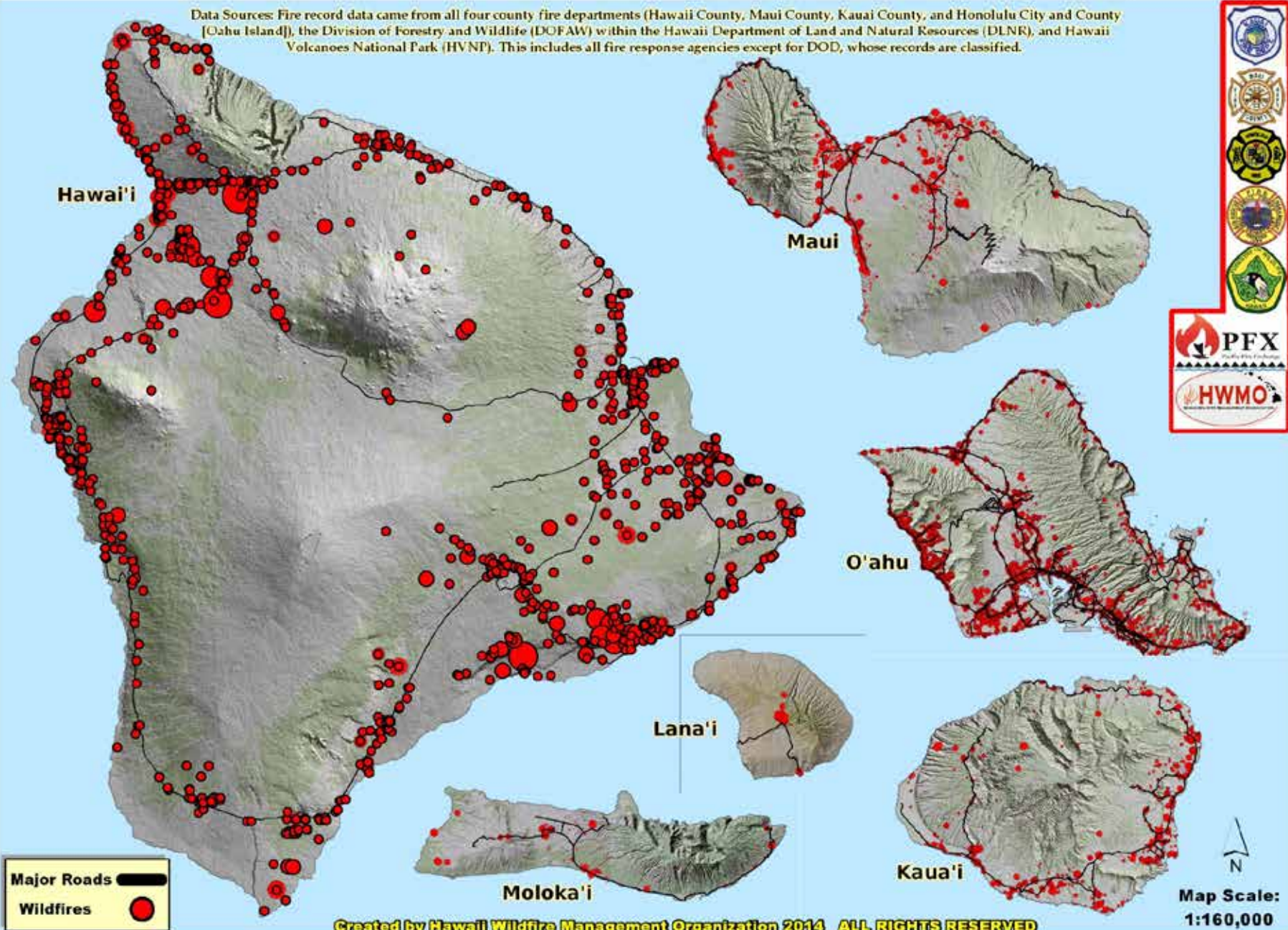
Hawaii has a wildfire problem

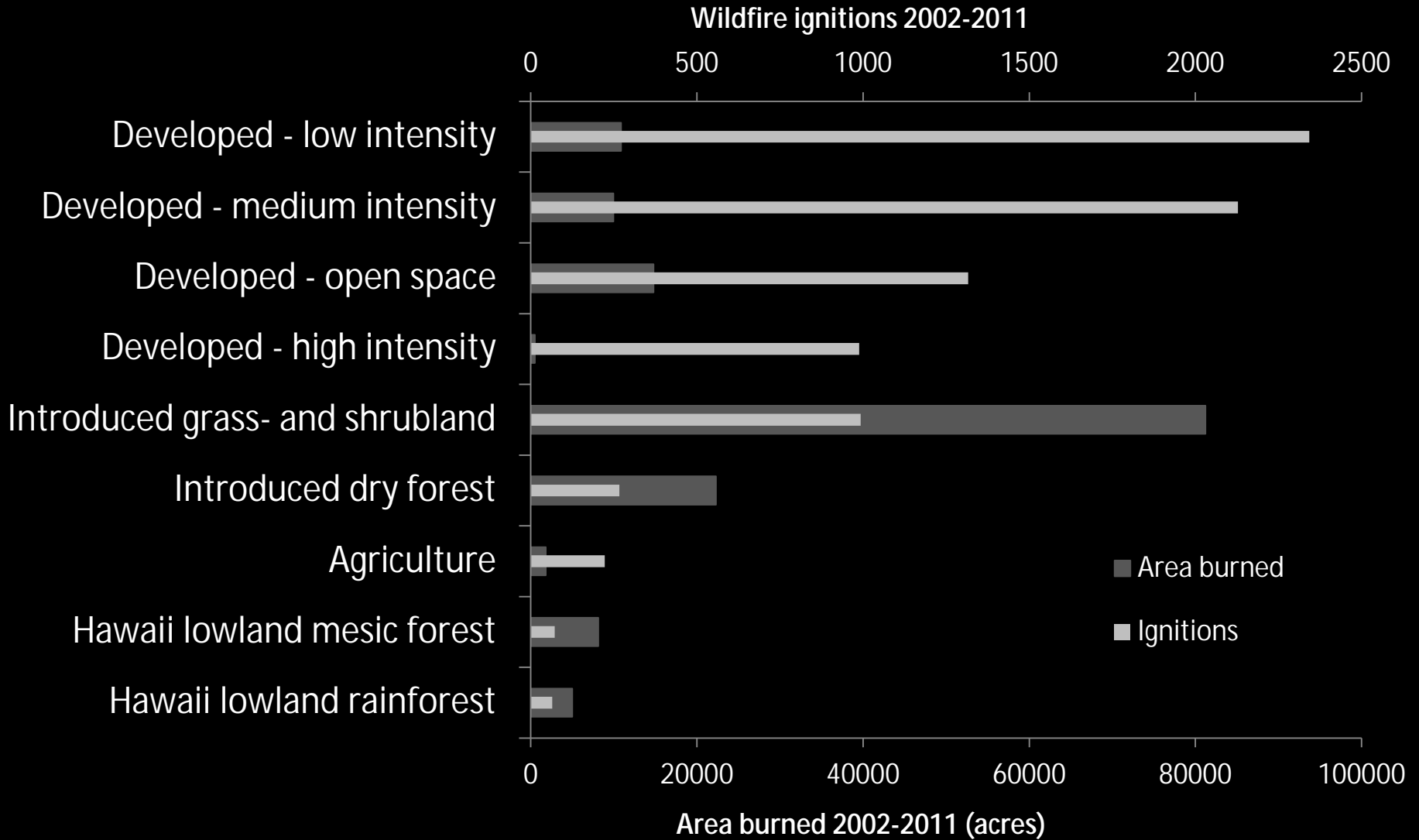


>1000 ignitions per year
>17,000 acres burn per year (2002-2011)

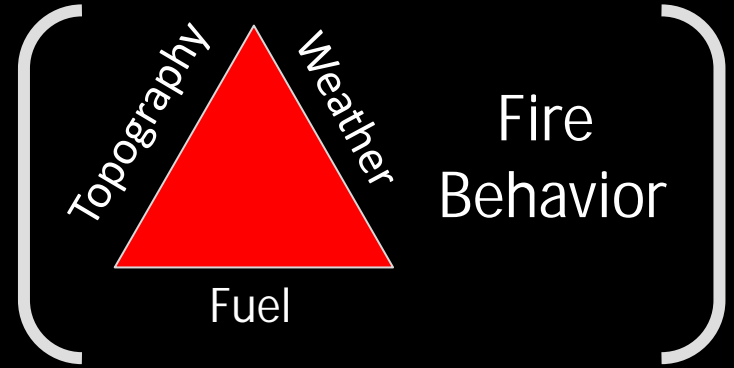
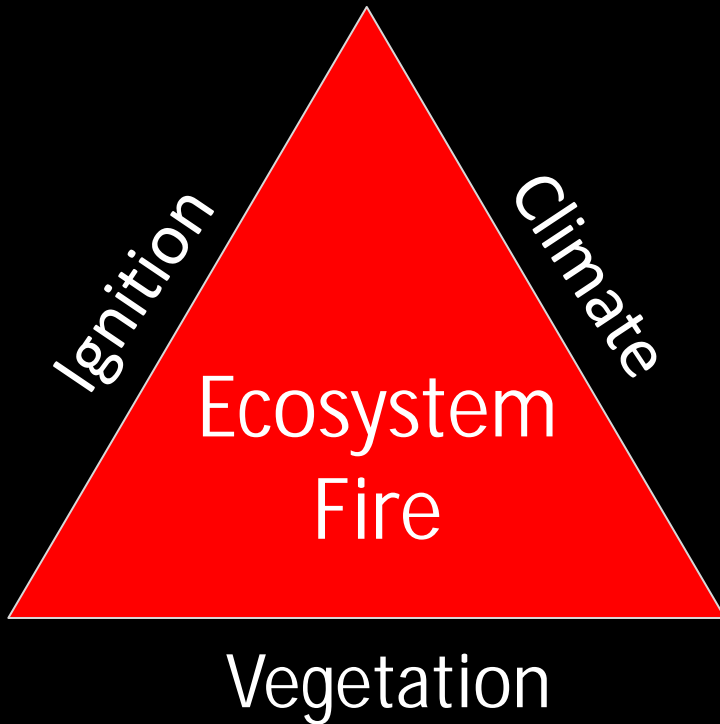
Wildfire Incidents for the 6 Main Hawaiian Islands

Data Sources: Fire record data came from all four county fire departments (Hawaii County, Maui County, Kauai County, and Honolulu City and County [Oahu Island]), the Division of Forestry and Wildlife (DOFAW) within the Hawaii Department of Land and Natural Resources (DLNR), and Hawaii Volcanoes National Park (HVNP). This includes all fire response agencies except for DOD, whose records are classified.





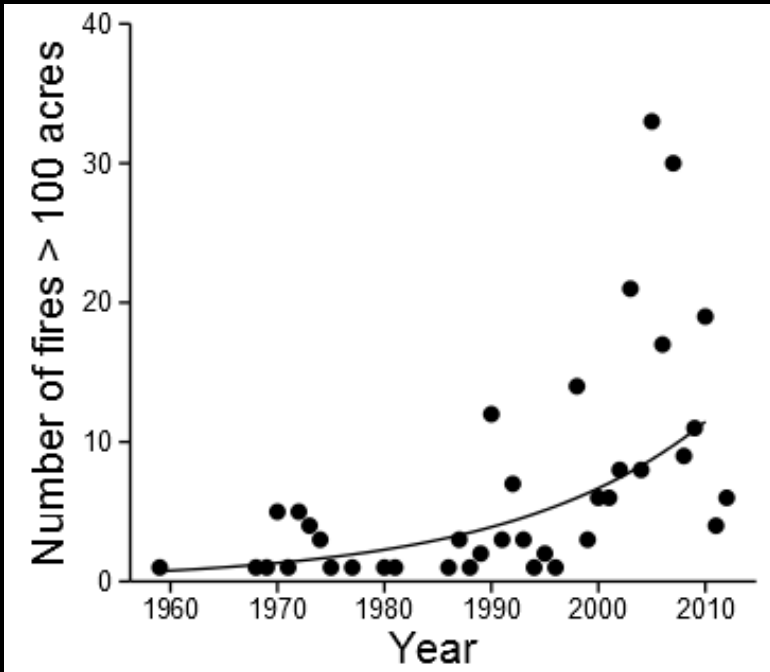
What can we manage?



FIRE REGIMES

Frequency
Intensity
Size
Spatial patterns

Living with fire via suppression?



Living with fire via management?





Interested in Pacific wildfire management?

PacificFireExchange.org

@PacificFireSci

trauerni@hawaii.edu, Sherman 240

