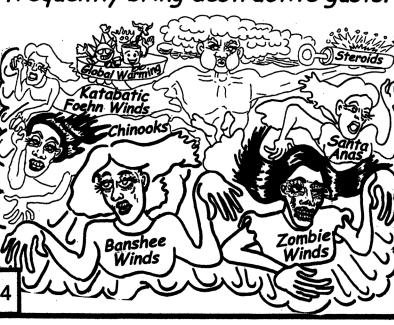




Even usually benign seasonal winds and squalls provoked by involves more frequent and severe geophysical features such as Foehn or Katabatic winds (regionally known as Chinooks, East Winds, and Santa Anas) will more frequently bring destructive gusts.



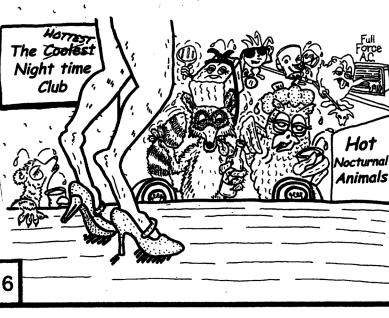
These super-stimulated wind events will tumble broken trees, brush, and branches across vast swaths of wildlands. Uncompacted, amply aerated by its vertical structure, now stochastic ignitions summon great landscape fires.



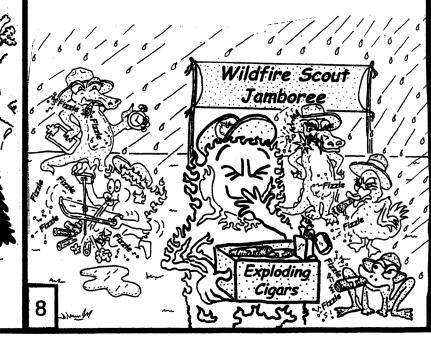
Also, increased atmospheric heat energy can create more evaporation and rapid plant growth-related transpiration. Consequently, the skies will hold more moisture.



Global Warming also favors higher nighttime temperatures and accelerates rapid dry-out of fuels. This dried duff and debris now provide abundant fuel for turbulent, intense, and severe wildfire.



During some times, increased humidity and rainfall will suppress wildfire ignition and expansion because high moisture content makes fuel unavailable.



However, increased rainfall leads to luxuriant growth of grass and brush. When this plant stem and straw dries out, they make excellent flashy fuel.



Enhanced atmospheric energy will

and severe lightning storms that

increase wildfire ignition and can

be sustained by abundant, dry

wildland fuel.

Whether ignition leads to extreme also create more frequent, intense, wildfire depends upon weather. Fuel moisture and wind remain the primary drivers of wildfire. The presence of abundant fuel matters

Severe heatwaves cause normally

low-intensity fires to transform

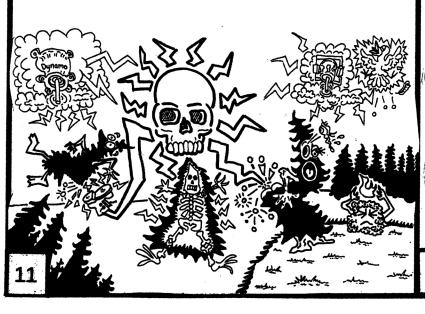
carbon sinks to carbon sources.

Large branches, trunks, stumps,

and usually moist duff and peat

now hemorrhage their

centuries-old atmospheric carbon.



little when fuels linger moist.

Using modeling, monitoring, and common firefighting tactics such as hand lines and burning out, wildfires can be shepherded to where they will do the most good while restraining their intensity



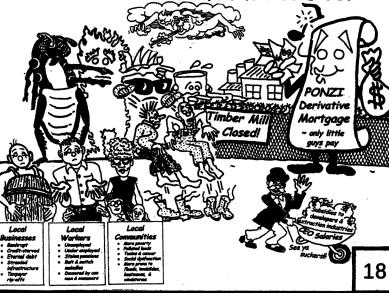
Million dollar firefighting campaigns often justify salvage logging and conversion to plantations. Studies suggest salvage logging wastes taxpayer money, rarely benefits local economies, damages soil, delays ecosystem recovery, & hemorrhages carbon dioxide from the site.



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Mechanical treatments such as logging Remote logging and "fuel breaks" make and thinning can make sense if no sense as responses to changed conducted adjacent to residences, wildland conditions due to Global especially it tollowed by prescribed Warming. Mechanical treatments fire. Homeowners or insurance companies can bankroll such thinning and prescribed fire through small only treat relatively small areas premium increases.



remain expensive, limited in scope, and prone to delays and default. They can compared to the extent needed.



Uniform conifer plantations offer limited benefits for wildlife. Thinning or salvage logging can convert resilient forests, naturally heterogeneous and diverse, into homogenous stands and plantations lacking diversity and resilience.



They homogenize complex soil microbial ecology, diminish nutrient cycling, and increase carbon dioxide emissions. Plantations display little resilience to disturbances and can be vaporized during low intensity wildfires.



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Global Warming increases frequency, intensity, distribution, abundance, duration, and severity of extreme wildfire. Destructive windstorms create abundant fuel. Deluges grow lush grass and brush. Heatwaves and warmer nights rapidly dry out fuel. Lightning storms ignite fires that expand into extreme wildfires.



Natural fire use and prescribed fire remain the only inexpensive and viable responses. Through coherent policies, savvy strategies, and tenacious tactics, wildfires can enhance ecological services such as clean water, wildlife habitat, and carbon sequestration.

