BURN-BABY-BURN experiments.

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YouTube Mowed-Straw BURN-EXPERIMENTS.

Mowing the weed grasses only once a year, allows weed grass straw to stay on the ground all summer, ready to be fuel for any wildfire that might sweep through.

In the San Mateo County towns of Portola Valley and Woodside, means between 4,000 and 6,000 pounds per acre is still around homes and also laying in the field next to the wooden buildings of the Portola Valley Town Center.

However, there are a few extreme areas like Palo Alto's Arastradero Preserve, on the hill above the parking lot, where all summer 17,800 pounds of mowed weed straw per acre is laying in the field where the Liddicoat July 1985 fire occurred, that required 200 fire fighters to put out.

And, in the town of La Honda--the six-acre grassland that is mowed only once a year, located in the middle of that community has produced between 6,000 pounds and 16,000 pounds of mowed weed grass straw per acre, that is sitting on the ground all summer.

To measure the pounds per acre, take a square foot of the mowed straw and put it on a scale and measure in grams. Then, multiply that number by 100 to get the pounds per acre.

I burned one square foot of straw in a stainless steel bowl, of a native annual grass that produces 600 pounds of straw per acre, and also burned 6,000 pounds and 16,000 pounds of the mowed weed straw, from at the La Honda site.

A pyrometer was measuring the burn temperatures. The difference was a 2-minute burn of the native grass straw at 300 deg F., vs. the 9 and 16-minute burns of the weed grasses at over 1,000 degrees F.

The amount of grassland fire fuels weed grasses produce, is between 10X and 30X as much as what the native California grassland plants evolved with, and producing temperatures 3x hotter and burning 5-8X longer than what the natives are used to—like putting those poor native plants in a pizza oven.

ALL land managers wanting to use controlled burns in California grasslands, should experiment in a very small area first and measure very detailed "before" and "after" vegetation cover percentages--to see if they are killing the natives when they burn a grassland that contains to much weed grass fire fuels—before they set fire to 100 acres, That is exactly what happened when vegetation cover percentage were measured beforeand-after the Cal Fire project at Mid-Pen's Russian Ridge 2007 grassland burn--two million native plants were cooked and killed, which then produced a vacancy which allowed two million weeds--the Harding grass, Italian thistles, star thistles and wild oats to take their place.

The main fire-safety issue result from this experiment--is that the once-a-year mowing does not reduce fire fuels at all-- the same number of pounds per acre are now laying down, and can actually burn longer and hotter, than if those same weeds were left unmowed and upright.

The problem of mowing once and producing a layer of 4,000-17,000 pounds of compacted weed grass straw on the ground, is that it smothers the fire-safe native plants that you want to grow and replace the flammable weed, that local Fire District safety requirements have been trying to manage, by mowing once a year for the last 100 years here in California.

VIDEOS---

Native grass straw at 600 pounds = <u>https://youtu.be/yzDtAF5pRTI</u>

Mowed weed grass straw at 6,000 pounds per acre = <u>https://youtu.be/XrwU-th-8R4</u>

Mowed weed grass straw at 16,000 pounds per acre = <u>https://youtu.be/iKxvYk_VKS4</u>

MOWED Purple Needlegrass native straw, at 1,200 pounds per acre, DOES NOT catch fire! = <u>https://www.youtube.com/watch?v=D9Wx7S4pzkM</u>

>>> The straw of this native WILL NOT carry fire!!

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