

March 2006

Crackling, Smoking Wildfires

There once was a fire named Fred,
Who from an unattended campfire he fled.
He burned up some homes,
And jumped fire breaking zones,
Choking lungs, tearing eyes as he fed.

Setting aside arsons, no one intends on sparking thousands of acres of forest on fire, yet more than 80% of wildfires are human-caused. Flicked cigarette butts, unattended campfires, burning debris on windy days, playing with matches, disposing of hot barbecue coals, operating equipment without spark arresters...these are the things that wildfires dream of. To heck with waiting for lightening to strike!

Fires are necessary to maintain healthy ecosystems. However, human presence and intervention severely impacts the natural fire cycle with sometimes devastating effects. We are in a dreadful dry spell, with a season of heat and winds upon us. Now is the time we need to be extra diligent with our behavior related to fire. Smoking materials (flicked cigarette butt?) sparked the Aspen Fire on Mt. Lemmon in 2003, causing 84,750 acres and 340 homes and businesses to burn, and millions of dollars in damage and recovery costs. The recent February Fire near Payson, AZ was caused by an unattended campfire, and burned over 4,200 acres (as of mid-February). Stating the champion understatement of the world, fires like these are **not** necessary to maintain healthy ecosystems.

Looking beyond charred acres and bank accounts is air quality and health. Wildfire smoke hurts both. Wildfire smoke is made up of particulate matter, carbon monoxide, and many other compounds depending upon the materials being burned and how hot the fire is. Health effects of wildfire smoke include irritations to the eyes and respiratory tract, reduced lung function, bronchitis, exacerbation of asthma, difficulty breathing, heart arrhythmias, and premature death.

Fires need three things to burn: oxygen, fuel, and heat. **Oxygen** is naturally in the air, and we like it that way. The **fuel** is the thing that will burn, like trees, shrubs, ground cover, and even your house. We like these too, and managing them properly can reduce the threat of fire. The **heat** may come from lightening, chimney sparks, barbecue coals, matches, cigarette butts, campfires, parking your vehicle in tall grass or shrubs, or sparks from chainsaws. Excluding lightening, the **heat** can be easily managed and has power to tremendously reduce wildfire threat.

Things you can do to buddy up with Smoky the Bear and prevent forest fires include:

- Take personal responsibility for any fire you start;
- Obey fire restrictions when camping or picnicking. Call the fire restrictions hotline toll-free at 1-877-864-6985 or click on http://gacc.nifc.gov/swcc/information/firerestrictions/az/restrictions_az.htm to check on restrictions and closures in Arizona;
- Never leave your campfire unattended, and stay with it until it is cold;

- Do not park your vehicle where vegetation is touching the underside of your vehicle (the normal operating temperature of catalytic converters may be upwards of 1,500°F). And if you do pause, look before you drive away;
- Never flick or leave a burning cigarette. Snuff it out and keep it in an ashtray for proper disposal; and
- Use spark arresters on vehicles and landscaping equipment. They capture and filter out exhaust and hot carbon particles.

Things you can do to protect your home from fire include:

- Plant fire resistant plants;
- Be sure your irrigation system is well-maintained;
- Space plants apart to slow the spread of fire;
- Prune trees so that the lowest limbs are 6' to 10' from the ground;
- Remove debris, leaf clutter, and dead or overhanging branches;
- Place woodpiles and wooden picnic tables away from home;
- Keep roofs free of needles and leaves;
- Screen openings under decks and attic and foundation vents; and
- Leave enough clutter-free space around your home to provide room for emergency vehicles.

Finally, things you can do to protect yourself from exposure to wildfire smoke while a fire is burning include:

- Stay indoors;
- Reduce activity;
- Breathe through your nose;
- Reduce other sources of air pollution in your home like smoking, vacuuming, or burning incense;
- Avoid cooking with barbeque grills and gas stoves (even propane and natural gas emits pollution);
- Use air conditioners set on “re-circulate” mode;
- Use appropriate room air cleaners;
- Make sure you have enough medication if you know you will need it to help you keep breathing; and
- Consider staying with friends or family who live in an area not affected by fire smoke.

Something to remember:

You start a fire, you own it. You leave a fire, everyone else owns it.

Remember that fire named Fred?
Campers snuffed out the fire instead.
With cool water they doused,
And went back to their house,
And then Fred came to rest in his bed.

Our actions make a difference. Keep fires down. Keep particulates down. Protect your health and the environment.

Questions or concerns? Click or call: www.deq.pima.gov/air/NEAP/dustinfo.html, karen.wilhelmsen@deq.pima.gov, or 740.3345.