

Fire fuel management is essential to forest health

By Dayne Barron and Scott Conroy

From the December 27, 2011 edition of *The Oregonian*

In a recent guest opinion, Dennis Odion and Dominick DellaSalla suggested that fire and hazardous fuels management on federal forest lands is misguided and offer an approach based on road closures, defensible space, replacing combustible roofs and limiting the spread of non-native grasses and "sprawl" in areas prone to wildfire. They proclaim this approach is informed by sound science, citing historical documents from land surveys done in the 1800s.

We all agree that the top priority for fire management is the protection of lives and property. We also support defensible space around homes, agree that fire has a positive ecological role in natural forests, and share their concern for the potential invasion of non-native vegetation. However, we know that forest thinning and the reduction of hazardous fuels do indeed address forest health.

Those of us who spend time in the forests have probably noticed fire-burned trees, charred logs, and charcoal. Evidence of previous fires is observed in virtually every forest stand in southwest Oregon. Prior to settlement and before there were barriers to fire such as roads and farmland, fires would burn across the landscape, sculpting the forest with every pass.

We know many trees survived dozens of fires. In fact, by repeatedly thinning stands and reducing competition for the established trees, it was fire that created the possibility for trees to survive and grow. Research conducted into the history and frequency of fires reveals that nearly every old-growth forest stand in southwest Oregon has experienced multiple fires and many older stands survived six or more fires each century. Because of these frequent fires, trees became large enough and accumulated bark thick enough to survive low-intensity fires, leading to park-like stands that were not nearly as novel as Odion and DellaSalla claim.

With fires excluded, forests continue to grow, becoming denser and accumulating fuel. This dynamic has been the subject of many studies, including a recent Umpqua watershed study, which measured a 10-fold increase in forest density since 1800. Similar numbers have been documented across the Rogue Valley on both the Rogue River-Siskiyou National Forest and the BLM's Medford District. Practically all the increases are a consequence of fire exclusion over the past century.

Fire intensity effects on forests and tree mortality is likely the most studied concept in the field of fire ecology. There are more than 30 models in use today that incorporate real data on potential weather, topography, fuels, structure, moisture and quantity of available fuel. They all agree that more fuel leads to more extreme fires which mean greater tree mortality regardless of size or age.

Federal land managers recognize the ecological role of fire. The Rogue River-Siskiyou National Forest has the authority to manage naturally ignited fires for ecological benefit where it is practical, safe and contributes to land-use objectives. Because BLM lands are primarily at lower elevations and intermixed

with private ownership, the objective for most fire starts is full suppression. Both agencies have robust prescribed fire and thinning programs that treat thousands of acres each year. While the typical burn or thinning project may not take place directly adjacent to developments, they are designed to strategically treat areas that will allow for the protection of private property should a large fire become established during the long, hot and sometimes windy days of August.

Odion and DellaSalla believe the pre-settlement forests were "a patchwork of densely grown areas intermixed with oak woodlands and shrublands." They advocate that management is not necessary because high-intensity fires are natural and beneficial to the forests. There is no doubt that under the right conditions and in the right fuel types, high-intensity fires did occur. However, we now have a completely different forest than was present in the late 1800s. Uncharacteristically high tree density coupled with a huge increase in homes creates an environment where high-intensity fires are not desirable for the forests and not compatible with current management objectives.

The Medford District and the Rogue River-Siskiyou National Forest are responsible for about 2.6 million acres of federal land, most of which is managed for multiple objectives. For example, watersheds are often managed for wildlife habitat, clean water, recreation, and riparian and stream values while generating both economic and social benefits. These objectives are designated by Congress and implemented through local plans and policies. Thinning and fuel treatments are designed to promote and protect these values and objectives by reducing the chances of high-intensity fires.

Given the potential for intense fires, the responsibility for the protection of lives and property, the commitment to preserving and enhancing wildlife habitat, and the obligation to manage these lands for multiple objectives, we simply cannot afford to treat fire and fuels on the public lands cavalierly. To do so is not in the best interest of the forests or our communities.

Dayne Barron is Medford District manager for the Bureau of Land Management. Scott Conroy is supervisor of the Rogue River-Siskiyou National Forest.