

Idaho Forest Health Highlights 2006

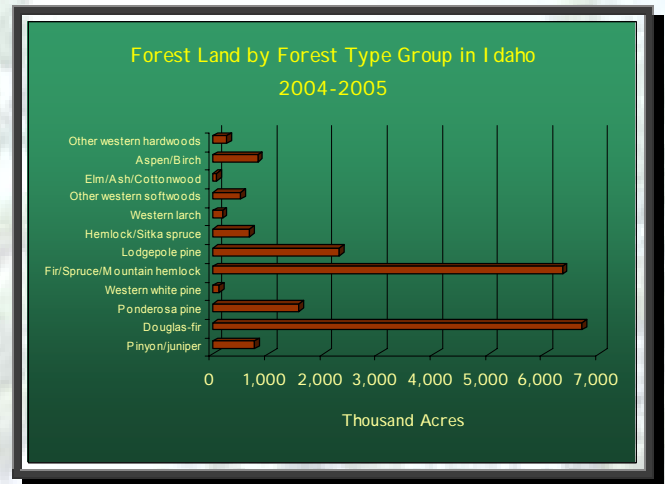


The Forest Resource

Idaho's forests extend from the large, crystal-clear lakes of the Idaho Panhandle, through the rugged central mountains of the Selway-Bitterroot,

Frank Church-River of No Return, and Sawtooth Wilderness areas, past the Snake River plains to the "mountain islands" of Southeastern Idaho. Idaho contains some of the most remote, rugged, and varied forests in the West.

The following graph presents a breakdown of forest cover on all land ownerships using the latest annualized FIA surveys from 2004-2005 for Idaho's forest resource. The survey reflected more than 22.1 million acres of forestland, with about 19.4 million acres publicly owned and over 2.7 million acres privately owned. Approximately 3.8 million acres of the forestland are in a reserve status, mainly National Forest wilderness areas, National Parks and Monuments. The predominant forest types in the state are Douglas-fir (33 %), fir/spruce/mountain hemlock (31 %), lodgepole pine (11 %), and ponderosa pine (7 %). Detailed information is available from the [Interior West FIA](#).



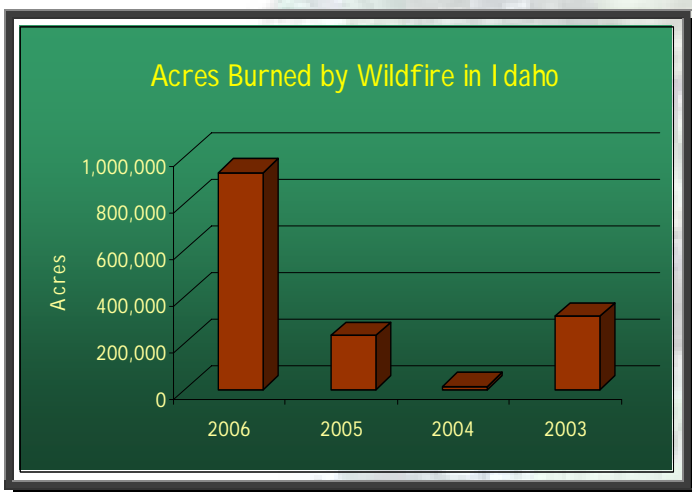
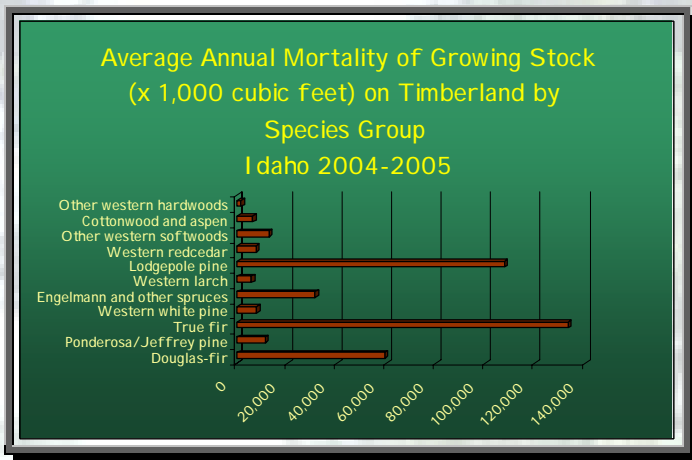
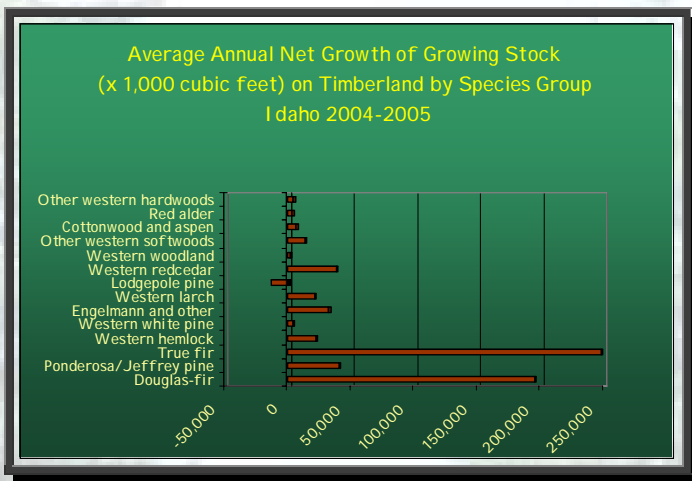
Components of Change

Because Idaho forests have high recreational, scenic, habitat, watershed and timber values, it is important to track their condition. Natural forces and human activities are responsible for changes in Idaho's forests. Growth and mortality reflect the changes brought about by insects and disease, fire and harvesting. In 2004, FIA began installing an annual system of plots to inventory the state's forests. Data from 2004 and 2005 indicate that the forests had an average annual net growth of 616,131 cubic feet of growing stock on timberland. During that same time, the average annual mortality of growing stock was 385,452 cubic feet. As in much of the interior west, wildland fire activity was above the recent norm in Idaho. Over 930,000 acres burned in 1,825 wildland *fires* in the state in 2006. An additional 110 fires were allowed to burn over 39,000 acres in wildland fire use management efforts.

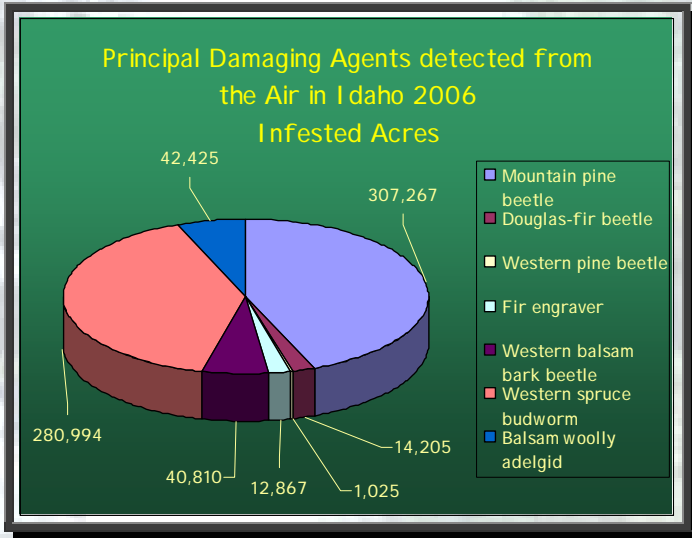
Forest Health Issues

The forests of Idaho are constantly barraged with factors that stress the trees including drought, fire, overcrowding and the influence of other biological agents. Warm and dry conditions over the last several years have compromised host tree health over Idaho forest landscapes, resulting in increased susceptibility to bark beetle and defoliator attack. Tree mortality in most reported species has increased, and that trend may continue as long as favorable conditions for insect infestation persist. Improving moisture conditions may improve tree health and reduce the level of mortality.

Mountain pine beetle continues to be the most frequently encountered and damaging bark beetle in the state. In some areas, intensity of damage may be decreasing because of the lack of suitable hosts to attack. Non-native invasive *white pine blister rust* and *mountain pine beetle* are causing extensive mortality in high-elevation five-needled pines. Recent surveys in northern Idaho high-elevation forests have found blister rust infection rates of up to 90 percent in whitebark pine regeneration. There is a growing concern that severe losses of large diameter whitebark pine due to bark beetles, coupled with regeneration losses due to blister rust, may have considerable impacts on water and wildlife in these fragile ecosystems. *Western spruce budworm* has been on the rise in western hemlock and grand fir in northern Idaho and subalpine fir, grand fir, and Douglas-fir in southern Idaho. Statewide the number of acres defoliated by WSBW doubled from 2005 to 2006. Subalpine fir mortality from *western balsam bark beetle* and other agents was mapped on fewer acres than in 2005 and the number of trees killed per acre decreased. Mortality from *Douglas-fir beetle* is decreasing as moister conditions have returned. *Western pine beetle* activity has also decreased with the return of improved precipitation. Grand fir mortality from *fir engraver* continued to drop in 2006 with the return of better precipitation. Forest pathogens, including *root disease* and the exotic *white pine blister rust*, are responsible for shaping the current composition and structure of many Idaho Forests, particularly in northern Idaho. These pathogens are not readily detected using traditional methods such as aerial detection survey, but their impact on Idaho's forest is significant.



The following chart provides data on the main insect and disease agents causing damage to Idaho's forests based on observations from the air in 2006. These numbers are underestimates for the year because of limited aerial observations in some parts of the state. Comparisons with other year's data should not be done directly because of this limitation.



Non-native invasive plants continue to be major issues in the forests and rangelands of Idaho. Distribution of several of the more significant non-native invasive plants are illustrated below.



Rush Skeletonweed



Yellow Starthistle



Common Crupina



Tansy Ragwort



Leafy Spurge

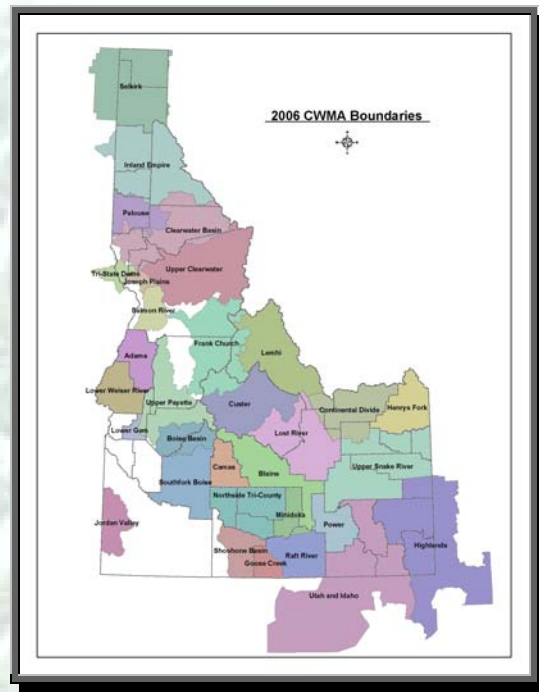


Spotted Knapweed

Source: University of Idaho Extension

The state of Idaho has recently renewed its efforts to detect and combat invasive species by hiring a Coordinator for Invasive Species to serve the state's invasive species council. The most visible work is being completed on invasive weeds. In 2005 the Idaho legislature approved a 2 year, 4 million dollar program to combat Eurasian Watermilfoil, an aggressive aquatic weed recently discovered in some of Idaho's lakes. The state has also revised its noxious weed law which now includes 57 species divided into 3 categories: statewide early detection rapid response noxious weeds (9 species), statewide control noxious weeds (24 species), and statewide containment noxious weeds (24 species). Noxious weeds are managed by 40 local cooperative weed management areas which develop strategic plans and annual operating plans. The state administers a cost share program which funds priority work identified by the cooperative weed management areas. The

state also supports the Idaho Noxious Weed Awareness campaign to inform and educate the public about Idaho's noxious weeds.



For More Information:

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