Legacy of Insect Defoliators: Increased Wind-Related Mortality Two Decades after a Spruce Budworm Outbreak
Sarah Taylor and David A. MacLean
now appearing in *Forest Science*, June 2009

Effects of spruce budworm outbreaks on balsam fir and spruce are well documented, but few studies extend beyond 10 years after defoliation ceased. We used permanent plots in 50-year-old balsam fir stands in northern New Brunswick, Canada, to determine legacy effects of the 1969–1993 budworm outbreak on stand development. Defoliation data were from annual aerial surveys and ground sampling. Plots were stratified into net stand volume development categories and related to outbreak phases, outbreak severity, and stand age. Stand age was an important factor influencing outbreak severity. Trend and rate of volume development over time were related to past outbreak severity and postoutbreak wind-related mortality, which peaked 11–15 years after defoliation ceased. Results indicate that aging postoutbreak stands are more vulnerable to wind disturbance events, effecting rapid stand decline.

Influence of Soil Site Class on Growth and Decay of Northern White-Cedar and Two Associates in Maine
Philip V. Hofmeyer, Robert Seymour, and Laura Kenefic
now appearing in *Northern Journal of Applied Forestry*, June 2009

Basal area growth of outwardly sound northern white-cedar (*Thuja occidentalis* L.) was compared to that of balsam fir (*Abies balsamea* (L.) Mill.) and red spruce (*Picea rubens* Sarg.) on 60 sites in northern Maine. Once adjusted for sapwood area, northern white-cedar growth was not strongly affected by site or light exposure class; growth was similar to that of red spruce but generally lower than that of balsam fir. Incidence of decay in northern white-cedar and balsam fir was highest on well-drained mineral soils, and mean proportion of area decayed at breast height increased in northern white-cedar as drainage improved from poorly to well-drained soils. These data suggest that northern white-cedar on lowland organic and poorly drained mineral soils in Maine have less decay, similar basal area growth, and similar site index relative to upland northern white-cedar communities.

Influence of Pine Straw Harvesting, Prescribed Fire, and Fertilization on a Louisiana Longleaf Pine Site
James D. Haywood
upcoming in *Southern Journal of Applied Forestry*, August 2009

This research was initiated in a 34-year-old, direct-seeded stand of longleaf pine (*Pinus palustris* Mill.) to study how pine straw management practices (harvesting, fire, and fertilization) affected the longleaf pine overstory and pine straw yields. A randomized complete block split-plot design was installed with two main plot treatments: no fertilization and fertilization. There were four subplot treatments: (1) control—no activity except a standwide thinning, (2) prescribed burn six times, (3) prescribed burned as in subplot treatment 2 and pine straw harvested twice, and (4) annual harvest of pine straw 13 times. Fertilization did not affect longleaf pine growth and yield over the 15-year study, nor did the subplot treatments. Furthermore, fertilization did not directly affect pine straw yields; however, it appeared that pine straw yields decreased over time.

Increasing Value and Reducing Costs through Hauling Longer Logs: Opportunities and Issues
John Sessions, Jeff Wimer, and Kevin Boston
now appearing in *Western Journal of Applied Forestry*, July 2009

The majority of log volume in the western United States is transported as long logs on stinger-steered pole trailers. Opportunities exist to increase value and reduce costs through hauling longer logs. Hauling longer logs often permits increasing gross vehicle weight, reducing the cost of transport, and using less fuel per unit of log volume transported. Longer logs also increase the potential to recover value by retaining more bucking options at the mill. On higher-speed routes, hauling longer logs will decrease fuel consumption if vehicle air resistance is reduced. A number of issues associated with hauling longer logs must be considered, including truck performance on horizontal and vertical curves, gradeability, loading and unloading trucks, mill yard layout, method of log measurement, and bridge limits.