

Compared to the West Coast of the United States, wind disturbances and subsequent damage to trees in Northwestern forests have been relatively infrequent events. When they do occur, there is significant economic pressures to conduct salvage log operations as an investment recovery strategy. The tradeoffs between the scale and timing of provisioning and regulating services from forest ecosystems impacted by timber salvaging have not been well studied, nor represented in current forest management decisions. Given the predictions of climate change models on greater variability and intensity of extreme weather events, conflicts between economic, social, and ecological goals impacted from salvage operations are expected to be magnified in the coming decades. This field research evaluated the impact of salvage cutting operations across a gradient of harvest intensity on the density and biodiversity of ground-dwelling arthropods. The hypothesis is that there is greater arthropod diversity in forest plots which have had wind disturbances but have not had salvage logging operations than in plot which have had both wind disturbances and salvage logging. Arthropod density and biodiversity was found by collecting leaf litter samples at wind disturbed forested areas, both in salvaged logged areas and non-salvaged logged areas. The each leaf litter sample was then processed through a Berlese Funnel, along with going through the leaf litter samples by hand.