IT'S GETTING HOT IN HERE: THE RELATIONSHIP BETWEEN CLIMATE CHANGE, ENVIRONMENTAL HEALTH DISPARITIES, AND SEATTLE STREET TREES
Session: In-Person

Lyndsay Felthoven*, @lyndslovesearth, Program on the Environment, University of Washington
Site Supervisor: Joseph Hulbert, Forest Health Watch / WSU Research and Extension Center in Puyallup
Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

As global warming becomes more prevalent each year, we are seeing that the health of trees is quickly deteriorating. Some neighborhoods with unhealthy trees may not be receiving as many of the benefits that those trees could provide if they had a full, healthy canopy. The aim of my project was to identify the correlation between environmental health disparity (EHD) ranking and the dieback of Western Redcedar street trees in Seattle neighborhoods. Washington State Department of Health has created a ranked scale of census tracts based on environmental exposures and hazards, and socioeconomic factors. Level 1 means that the population has low vulnerability, while level 10 indicates high vulnerability to environmental health threats. I performed a random selection to obtain a sample of 60 trees, only selecting ten trees from ranks 1-3 and 8-10. After visiting these trees I uploaded pictures to a project I created on iNaturalist and filled out observation fields regarding factors about the health of the trees (such as dieback percentage). For my internship duties, I also uploaded these observations to a project created by Forest Health Watch on Western Redcedar Dieback. My results show a positive correlation between EHD ranking and percentage of canopy dieback. This is important because communities with high environmental health disparities are not only experiencing human health issues, but tree health as well. As climate change worsens, trees will play a critical role in combating pollution and heat, but many communities will not have healthy trees if dieback continues.