



Don McCubbing HCTF Scholarship Recipient 2026



Kasper Giesbrecht

Kasper is an undergraduate student working under Dr. Morgan Piczak in the faculty of Forestry and Environmental Stewardship at the University of British Columbia. Kasper grew up in Victoria, BC, developing a deep-rooted interest in, and care for, aquatic and forested ecosystems. Throughout his upbringing, Kasper participated in salmon release programs in Goldstream Provincial Park, as well as riparian rehabilitation projects within the Bowker Creek watershed. Kasper has closely felt the ecosystem services of healthy relationships between aquatic and forest ecosystems and hopes he can work to further the understanding and support of these relationships.

Kasper's path into research has been shaped by his personal life, work and education. His experience as a wildland firefighter exposed him firsthand to the impacts of wildfire on aquatic ecosystems, while his coursework on historic fire regimes, freshwater ecology, and climate change gave him a broader understanding of the shifting relationships between humans, fire, and the natural world. Having lived his entire life in coastal BC, Kasper's strong emotional connection to its forests and waterways has motivated him to help rediscover the balance between fish, fire, and people that Indigenous stewardship historically maintained.

Kasper's research will examine the impacts of wildfire on juvenile Chinook and coho salmon in small streams and tributaries across BC. As wildfires increase in frequency, intensity, and duration under a changing climate, their effects on freshwater ecosystems and culturally important fish species remain poorly understood. Kasper will be studying salmon in the parr life stage, when active feeding and high growth rates heighten sensitivity to environmental stressors.

By sampling tributaries disturbed by wildfires in the past one to two years, Kasper plans to use in-field respirometry, swim tests and other techniques to compare metabolic rates and energy demands between fish located in burned, and unburned control sites. This will allow for insight into the additional physiological stress placed on juvenile salmon as a result of wildfires.

Thanks to the contributions and data collection of the Piczak lab, Kasper's project will be able to address a crucial dynamic in disturbance ecology. Although salmon have coexisted with wildfire for millennia, the scale of today's megafires is unprecedented for the species, and effective conservation strategies depend on understanding how this novel disturbance regime affects sensitive freshwater life stages. His findings will contribute to a growing dataset informing salmon and wildfire stewardship, offering insight for both wildfire and fisheries management.



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