



Leland (Lee) Medley Humble passed away peacefully on 4 August 2020 with his family by his side in Victoria, BC, Canada. Lee was an exceptional scientist who inspired his colleagues with his passion for science and made significant contributions to forestry and entomology. Born in 1951 in Dawson Creek (BC), he was raised in Nelson (BC) where he developed a great appreciation for the outdoors. Lee moved to Victoria BC to complete his BSc in biology at the University of Victoria; he stayed there for the rest of his life! He completed his PhD with Richard Ring on insect cold tolerance of arctic sawflies

and their hymenopterous parasitoids, and then in 1985, he took a position as a forest entomologist at the Pacific Forestry Centre (Canadian Forest Service). He had a 35-year career of scientific discovery, collaboration and fun with the Canadian Forest Service. Lee reared and identified forest insects collected in the annual surveys conducted by Forest Insect Disease Survey (FIDS) in the BC & Yukon Region. He was particularly interested in the biodiversity of arthropod communities in the tree canopies of temperate rain forests of coastal British Columbia, working with numerous collaborators in the Montane Alternative Silviculture Systems (MASS) project.

Lee was an active participant in the British Columbia Plant Protection Advisory

Council and served on the Regional Emergency Action Coordination Team. In that capacity, he was actively involved in the science and politics of gypsy moth control in the northwest and provided advice regarding gypsy moth species associated with cargo ships. Lee helped develop a DNA-based diagnostic test to differentiate the European from the Asian sub-species and in the process set up a high security quarantine room at the Pacific Forestry Centre. In the early 1990s, his Asian gypsy moth work took him to the Russian Far East where he worked on international collaborations addressing moth attraction to lights at shipping ports in attempts to prevent and identify high-risk ports of departure.

When the FIDS program ended in 1996, Lee focused his time on alien invasive species, due in no small part to the discovery of the Asian longhorn beetle in northeastern United States. He identified established alien species, developed surveillance and diagnostic tools, studied pest movement pathways and found practical mitigation opportunities. Lee was heavily involved with projects on balsam and hemlock wooly adelgids, locating predators that could be reared and released in eastern United States. He worked closely with the Canadian Food Inspection Agency, the USDA Animal and Plant Health Inspection Service, and the USDA Forest Service, as well as international organizations such as the International Union of Forest Research Organizations, the International Forestry Quarantine Research Group and the North American Plant Protection Organization. He provided key data to support the development and refinement of the international wood packaging standard, ISPM 15.

Lee attended numerous conferences to share information and collaborate with colleagues. He was an active participant in the yearly USDA Interagency Forum on Invasive Species (initially called the USDA Interagency Gypsy Moth Research Forum) in Annapolis MD, making numerous friends and collaborators. He could often be found in the bar in the wee hours of the

morning talking about exotic insects! As lead on local arrangements, Lee helped organize several meetings of Western Forest Insect Work Conference held in British Columbia.

Lee Humble was a great teacher and mentor. He served on committees of numerous graduate students and mentored many undergrad students through the co-op program. His true classroom was in the forest where he knew plants and insects and how they interacted. He was always looking for ecological connections, formulating theories and planning new experiments. Lee was also a skilled woodworker, designing and crafting many specialized pieces of lab equipment out of wood, plastic or metal. For example, he built a device (Humble Water Bath) to very precisely measure the high temperatures required to kill insects, a critical tool that will be used to change global trade regulations in years to come. Lee had three loves in life: his family, his work, and his friends and colleagues. He will not be forgotten by any of us. For more information, go to Bulletin of the Entomological Society of Canada 52 (4): 201-205. https://esc-sec.ca/wp-content/uploads/2020/12/2020_4_December_ESC_Bull-1.pdf