Murray F. Buell Award

Murray F. Buell ascribed great importance to the participation of students at meetings and to excellence in the presentation of papers. To honor his dedication to the Ecological Society of America and to the younger generation of ecologists, this award is presented to a student for the outstanding oral paper presented at the Society’s annual meeting.

The winner of the Murray F. Buell award in 2012 is Kate Boersma for her presentation “Top predator extinctions in drying streams modify community structure and ecosystem functioning,” which is based on her doctoral work at Oregon State University under the supervision of David Lytle. Kate received her bachelors’ degrees in environmental science and Spanish from Northwestern University in 2001. She followed this with a M.S. in Fisheries Science from Oregon State in 2007.

Kate hypothesized that increased drying of streams in the Southwest could lead to extirpation of top predators, leading to significant changes in community structure. To test this, she constructed mesocosms replicating arid stream invertebrate communities and removed the top predators. This led to a trophic cascade, mediated by the release of algae-grazing mayflies. There were also indications of competitive release among secondary predators, suggesting that top-down effects in these habitats are diverse and important.

The Buell judges were impressed by Kate’s clear command of the background information and her focus on how climate change may impact predator–prey interactions. They were unanimous in recommending Kate for the Buell award.