The C.P. Gillette Museum Gets a New Home

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On July 16, 2018, the C.P. Gillette Museum of Arthropod Diversity officially started its move from Laurel Hall across campus to its new home in the Hartshorn Building. The move was completed in the span of a week, moving from its cramped quarters of 2200sf. to its new spacious housing of just over 9000sf. This talk will chronicle the move from its preparation and planning to the results of the successful move and Open House in mid-September.

The Denver Museum of Nature & Science as part of LepNet: Distribution Patterns of Select Lepidoptera Families in the Colorado Region

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The Denver Museum of Nature & Science (DMNS) has significant and growing holdings of butterflies and moths (120,000+), including micro moths. As part of the Lepidoptera of North America Network (LepNet), an NSF-ADBC funded program to digitize specimen data and produce high-resolution images, DMNS museum holdings are publicly available on the LepNet and Symbiota Collections of Arthropods Network (SCAN) database. Museum occurrence records can facilitate research pertaining to species distribution including range shifts, phenology, as well as assist in determining habitat associations and niche requirements. Here, we present distribution patterns of common Lepidoptera families in the Colorado Region from the DMNS collection. Occurrence data were exported from SCAN and then imported into ArcGIS to highlight trends for areas with geographic representation.

Forest Fire Severity Affects Host Plant Quality and Insect Herbivore Damage

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Climate change models predict increased forest fire occurrence and severity in the near future. Forest fire disturbance affects multiple ecological interactions, but there is little evidence for how naturally-occurring fires affect plant quality and herbivore damage. We surveyed three fires in the Rocky Mountains to investigate the effects of fire severity on plant quality and herbivore damage, in particular by Polygonia gracilis zephyrus. We found that the effect of fire on insect herbivore damage is mostly direct, but that indirect effects mediated through changes in plant quality are also significant.

Morphology and Genetics of North American Orange-tip Butterflies (Anthocharis, Pieridae)

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Orange-tips are a butterfly group limited to the Northern Hemisphere. In North America there are seven species divided into four species groups. Each species group is well-defined by appearance and by DNA ‘bar-codes’—mitochondrial DNA gene COX I gene. Each species is also well-defined by its unique bar-code
Program and Abstracts
29th Annual Meeting of the High Country Lepidopterists
November 17, 2018, Butterfly Pavilion, Westminster

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