

**Speaker:**

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Date: Monday, Oct. 05, 2020**Time:** 4:00 pm - 4:50 pm**Zoom:** 952-3324-4564**Passcode:** 835322**Title:**Seasonal and daily host-seeking activity of the biting midge - *Culicoides sonorensis***Abstract:**

Culicoides sonorensis biting midge is the main vector of bluetongue virus (BTV) in most parts of the U.S. BTV is circulated between ruminant and biting midges through the blood-feeding behavior of midges, so investigating the host-seeking activity pattern of biting midges is important for understanding the BTV epizootiology. *Culicoides sonorensis* is sampled using a time-segregated rotating trap baited with CO₂ from April 2018 through April 2021. The bi-weekly 24-hr collection showed the host-seeking activity of *C. sonorensis* throughout the day and the year. The annual host-seeking activity is highly seasonal with late summer and fall being the most active and with winter and early spring being the least active seasons. The peak of daily host-seeking activity shifts as season changes. In spring and winter, the activity peak mostly occurs at around sunset, while in summer, the activity peak extends to midnight. Environmental variables affect the seasonal host-seeking activity and may influence the diel host-seeking activity pattern, which requires further statistical analysis.