

---

## **\*\*THE EFFECT OF VARYING MOON PHASE ON NOCTURNAL FLIGHT CALLS (Poster)**

Destini J Greer\*, Florence Carlton High School, Florence, MT

Vanessa Haflich, Florence Carlton High School, Florence, MT

Craig Kuchel, MPG Ranch, Florence, MT

Many avian migrants travel at night to avoid predators and reduce the risk of increased exhaustion during the heat of the day. It is well known that nocturnal flight calls (NFCs) allow songbirds to migrate in the dark while still effectively communicating among their species. What is not understood is what factors influence the production of calls over the course of the migratory season. In 2012, the MPG Ranch in Florence, Montana joined with software developer Harold Mills to design his recording program, Vesper, around their workflow. Vesper has enabled researchers to study NFCs using remote recording devices and online software that allows species to be classified both digitally and manually based on spectrograms of individual calls. By collaborating with MPG Ranch, we hoped to better comprehend the effect of luminosity, determined by varying moon phases, on the frequency of NFCs. With the autonomous recording units set up at Florence-Carlton High School and

the MPG Ranch floodplain monitor, we collected NFC data from Savannah Sparrows, Vesper Sparrows, and Wilson Warblers, and are in the process of analyzing the relationship between their call activity and luminosity.