## Conservation Corner

By Corinne Peterson Pocahontas County Naturalist



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Recently we received a call from Matt Kenne of Agona who was inquiring about stands of rattlesnake master plant in our conservation areas here in Pocahontas County. I'm sure many of you are familiar with this perennial herb found in tallgrass prairies across the Midwest whose name comes from the American Indians who used the roots as an antidote for rattlesnake venom. A member of the parsley family, this tall plant is easy to recognize with its long, narrow, prickly-edged leaves up to 3 feet long and many thistle-like flower heads that attract a variety of pollinators including native bees, beetles, and flies.



But did you know that the rattlesnake master is also the sole host plant for the *Papaipema eryngii* moth, a/k/a rattlesnake master borer, and a candidate to be listed as an endangered species? These small, rusty-brown moths with white spots are currently "on the wing." Each fall, female moths lay 200+ eggs in the prairie duff to overwinter. In late May the larvae emerge and bore into the stem of rattlesnake master plants. Over the summer they slowly eat their way down the root, go dormant for one week in early August, pupate in the root or soil for 18-21 days, and then emerge as adults to start the lifecycle once again.

And so it was that Matt Kenne and Aaron Brees of the Iowa DNR descended on Kalsow Prairie the evening of October 2 to look for this rare moth as experts and amateurs survey likely spots across the state. After determining the presence of rattlesnake master, they set up two bucket and two sheet traps lit by mercury vapor lamps to attract moths from a good distance.

While we waited, Matt shared stories of growing up, collecting bugs with a homemade butterfly net his neighbor lady made for him. Meat cutter by day, nature lover by night and weekends, Matt's hobbies include birdwatching and insect collecting. When asked why moths, he stated he enjoys the solitude plus, as not many people are looking, it's always fun to find new species for Iowa. He also enjoys learning more about caterpillars and their host plants and has raised some in captivity, substituting a potato or carrot for the rattlesnake master root.



All together, another nifty experience on the prairie, regardless of the outcome as Matt informed me this week that "The night was pretty much a big bust. Fog rolled in after you left until 11 o'clock, and (in my experience) moths hate fog. I think it's like icing on airplane wings. After 11, it warmed up a little bit like we wanted it to, but things never really took off. We packed up at 2 o'clock and headed for home. Aaron has the master list, but I only recall one pair of *Papaipema impecuniosa* (Aster Borers) on his sheet and just a dozen or so other common species on the night. On the bright side, we got serenaded by some coyotes..."