Chats with Janice
Janice Greene, GOAS Chapter President

For this column, I want to share a little about some of my graduate students and their research on barn owls. In December, my 2nd graduate student working on barn owls graduated. Grant, my first student, worked with the Missouri Department of Conservation to determine how prevalent barn owls were in the area and if they would use nest boxes in “working” barns. He had two successful barn owl clutches (out of 10 boxes) which he monitored from egg to fledging through the use of game cameras. Most chicks made it to fledging with only 1 or 2 losses, probably due to larger siblings (this is common when eggs hatch asynchronously especially in a large clutch).

Samantha, my 2nd student, continued with Grant’s study but also added an analysis of the habitats surrounding successful versus unsuccessful nest boxes. Samantha had four successful clutches. Small sample size did not allow us to do statistical analysis, but there were some trends. Grasslands, in the buffer zone around successful nests, ranged from 38% to 47% compared to buffers around empty nest boxes which were less for the most part. Forested areas ranged from 19-29% in areas around successful nests while unsuccessful nest boxes had forested areas below and above this range. This suggests that forested areas may play some role in the success of barn owl nesting. A suite of habitat requirements may be necessary for barn owls. This was a preliminary study so more studies need to be done to see if these habitat relationships are “real” or not.

Both Grant and Samantha saw aggressive interactions between barn and barred owls. In both cases, the barn owls were somewhat aggressive toward the barred owls and either successfully defended the box or actually drove the barred owl away, at least temporarily. These interactions have not been documented before according to several researchers.

Winter is a tough time for many birds, including barn owls. Barn owl ranges usually do not extend into areas with heavy snows, and there can be high mortality in winter usually from starvation. Barn owls are not well insulated so must eat more in the winter to maintain body temperatures, but this is also the time that small mammals become less active (Barn Owl Trust website). Rains in the winter are also tough on barn owls because their feathers are very soft, becoming saturated with water which can reduce flight time. Of course, deep snows are bad but so are snows that melt and refreeze. The icy top layer makes it difficult for owls as well. Historically barn owls have been able to survive winter by catching prey inside of barns, but as barns disappear and feed storage becomes tighter, most are not able to catch a lot of prey inside anymore.

As climate changes and with the change and decline in barns, barn owls are going to continue to have a tough time. But what unique, creepy sounding, wonderful birds! I am always thrilled when I see one. I hope you are too!
Dr. Brian Greene will present *The Snake in the Grass: What the Outdoor Enthusiast Needs to Know About Venomous Snake Biology and Safety.*

Dr. Greene is a herpetologist who received a PhD in Wildlife and Fisheries Sciences from Texas A&M University in 1993. He is currently an associate professor of biology at Missouri State University (MSU) where his research has mainly focused on the ecology of snakes, especially Ozarks populations of the Northern Cottonmouth.

A diverse group of faculty from MSU contributes their time and knowledge to each class attending the Green Leadership Academy (GLADE). We’re grateful that Brian has shared his expertise starting with the first GLADE class in 2009.

Come at 6:30 pm, Thursday January 17th for refreshments and to socialize. The program begins at 7:00 pm, followed by the membership meeting at the Springfield Conservation Nature Center, 4601 Nature Center Way (off Business Highway 65). Editor’s comment: This is an amazing program and it’s guaranteed you’ll learn something new!

Ruth Grant, Program Chair