

# The Guts of Birding

by

Alexander Martin

OYBC visits OSU Museum of Biological Diversity on January 21, 2012

The Snowy Owl is one of nature's most beautiful animals. The sight of one of these magnificent creatures soaring silently overhead is awe-inspiring; such is their grace and grandeur. In Ohio, however, the sight of a Snowy Owl is a rare thing indeed, for their primary food source and the temperatures they prefer exist much farther north in Canada. Snowy Owls feast mainly on lemmings, and every four years or so, the lemming population explodes, causing a correlated explosion in the owl population. Over-crowding occurs, and some of the young are forced to hunt for food farther south, where many perish. Such was the case with one of the Snowy Owls that was observed in Ohio this January. Though his story is sad, he gave OYBC members a chance to witness a facet of conservation less common than most. Read on if you will, but be warned: the words that follow are not for the faint-of-heart. If you'd rather read about something more pleasant, just click somewhere else.

To put it quite simply, OYBC's Central Ohio Chapter got to discover the guts of birding this January. When the Snowy Owl was spotted in Hardin County in early January, birders rushed to observe the animal. Unfortunately, this spectacle was not long-lasting. A few weeks after he was first spotted, the owl was found dead and frozen in the snow. Soon after, he was packed up and sent to Dr. Jacqueline Augustine, a Biology professor at OSU's Lima campus, where she would prepare the bird to be laid to rest in the OSU Museum of Biological Diversity. This private archive houses more than 15,000 tetrapod specimens alone and is the second largest collection of tetrapods in North America. Normally, this archive is closed to the public\*, but OYBC was fortunate enough to be able to organize a field trip to the museum to observe the Snowy Owl being skinned.



On Saturday afternoon, January 21st, about two dozen OYBC members, parents & advisors convened at the Museum, some having traveled from as far away as Michigan. After meeting and greeting new members Chloe and David, we spent time catching up with old friends that we hadn't seen since our last outing for the OYBC Conference in November. Finally, our host, Angelika Nelson, a curator of the museum, arrived to initiate our tour.

The first sight that met our eyes when we entered the Tetrapod archive was the dozens of mounted birds and animals that the curators had so generously set out for us. Included among them were a Kiwi, a Great Horned Owl, a Kookaburra, and the skull of an African Elephant. Dr. Augustine was stationed at a table off to one side, in front of a cabinet of various birds. The Snowy Owl lay limp on the table, next to a jar of ground corncobs and a collection of metal instruments.

We watched as Dr. Augustine prepared the bird for skinning. She pointed out the protruding breastbone and the lack of muscle that indicated that this owl had died of starvation. Making two incisions down the length of the breastbone, she cut through the skin (which is very thin and "skinny") and exposed the carcass underneath. Once this was done, she extracted the body, methodically turning inside out first the wings, then the head, removing the internal bone structures and leaving only the skin and feathers behind. To soak up any blood that escaped, she used ground corncobs and cotton.

It was surprising to see how compact and self-contained an owl's body is. All the internal organs are held in place inside the rib cage by layers of membrane and tissue. The carcass, which was roughly the size of a small chicken, was significantly smaller than one might expect from an owl as large (visibly) as the Snowy Owl, demonstrating just how much of their body is made of feathers.

The entire skinning process took about three hours to complete, so while Dr. Augustine worked on the owl, the OYBC members were free to browse the rest of the collection. Several Ohio State University grad students were also there to answer questions and engage the students in a few small activities. We saw how tiny hair-like feathers on the leading edge of an owl's wing disrupt the airflow that would normally whistle over the wing in flight, giving the owl the ability to swoop silently towards unsuspecting prey. A display of various preserved bird feet demonstrated how different birds have adapted their foot design to their environments—wading birds have long, spread talons to help them balance in shallow water, while waterfowl have webbed feet that are designed to propel them through the water. The foot of the snowy owl is, according to one grad student, built as a Muppet look-alike, although it is improbable that any of the Muppets have talons as sharp as those of the Snowy Owl.

Some students also explored the dustier parts of the museum's collection. These specimens included the head of a polar bear, an armadillo that looks quite like a pinecone, and a myriad of snakes, lizards, and salamanders all preserved in formaldehyde.

All of these objects, some over a hundred years old, are very important to scientists. Studies making connections between various ecological and biological factors that change over time rely on these records of the past to draw their conclusions. Retired professor of entomology Dave Horn, aka "Moth Man," re-enforced this importance, showing us how often times the information that is associated with a specimen is as important as the specimen itself. He illustrated this with a personal account of how he had once contributed to a research project using data he had collected and recorded more than half a century ago in his 5th grade field notebook. His message to OYBCers: you're never too young to make a contribution to science, as long as you're diligent and keep proper notes.

Our visit to the museum highlighted an important fact. As birders, we often like to associate ourselves with the beauty of our sport. We look for the brilliant colors and the quirky attitudes of our aviary friends. But at heart, we're all simply conservationists by a different name, and our goal is to promote the conservation of the natural world that we love and cherish. Though perhaps hard for some to stomach, the task of collecting, skinning, and archiving that world is as much a part of the process of conservation as any other. The opportunity to discover the very core of that process was an educational eye-opener that OYBC members will not soon forget.