

# Chequamegon Chirps



November, 2022 Volume 40 Number 11

The November meeting on the third Monday, November 21, will be in the usual meeting room at the Medford Library at 7:00 P.M. There will be an informational bird National Geographic movie plus more details on Audubon Christmas Bird Counts. The Medford count is scheduled for Saturday, December 31. Contact Joe at 715-965-3498 if you have questions, or hopefully, let him know you would like to participate. Ken 715-613-0262 and Connie 715-654-5819 can give you more info about the Spencer, Willard and Gilman counts.

## How do birds deal with cold feet?

Have you ever wondered, “How the heck can birds keep from freezing their feet?” That thought comes to me sometimes when I’m wearing thick socks, insulated boots and still have cold toes. With an exception or two, they have no leg feathers, just bare skin and bones. “Birds such as gulls and ducks endure long periods of standing on ice or in icy water via **regional heterothermy**, or maintaining a core body temperature while allowing the temperature of extremities to deviate from the core temperature.”

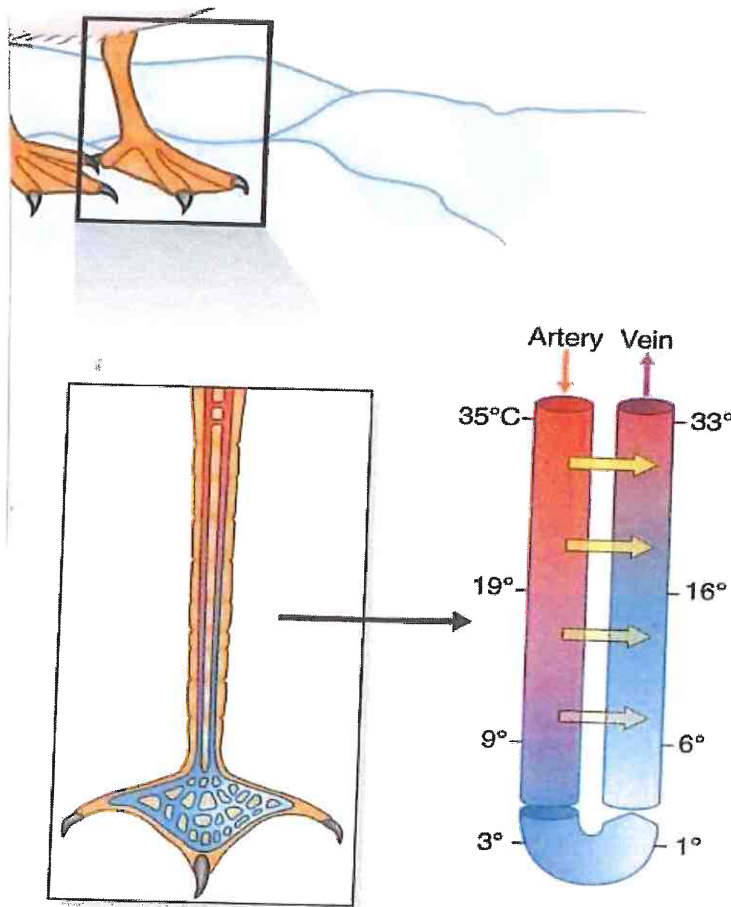
“Keeping an entire foot warm requires a tremendous energy cost. Instead, these birds allow the foot to approach freezing temperatures. Blood is still supplied to the foot, however, so the birds use a **countercurrent heat exchange system**—cool blood coming back from the foot travels through veins grouped around arteries that are sending warm blood from the body to the foot. Heat is transferred from the body to the foot. Heat is transferred from the warm arteries to the cool veins.”

“This countercurrent heat exchange system is very efficient at maintaining heat at the core. Periodic increases in blood flow allows a little heat to reach the foot to keep it from freezing.”

“Bird feet can also withstand low temperatures without damage because they are mostly tendons and bones with little muscle or nerve tissue. Since this is not the case for human feet, our own countercurrent exchange systems do not prevent frostbite.”

This information came from the HANDBOOK OF BIRD BIOLOGY which came from the Cornell Lab of ornithology. For more info, visit [birdbiology.org](http://birdbiology.org).

Here's something I'm curious about. We moved back to this area 52 years ago and I can't remember mourning doves at all during the early winters. Maybe some ten years later, a few stayed, but their numbers seemed to drop off quite a bit and frozen feet and toes were common by spring. Have our milder winter temperatures been a tipping point? Have surviving mourning doves become more resistant to cold temperatures? Are my recollections inaccurate?



**Countercurrent heat exchange:**  
Intricate networks of blood vessels act as countercurrent heat exchangers to heat blood as it returns from the foot to the body. This steep temperature gradient (yellow arrows) reduces heat loss and saves a tremendous amount of energy.  
Graphics: © Cornell Lab of Ornithology.  
Adapted from Randall et al. 2002.

## Time to Talk Turkey

The way turkey populations have exploded over the state after being reintroduced from Missouri several decades ago, any month could be appropriate, but since Thanksgiving is just a few days from now, the subject is extra timely.

Turkey production is a huge business in the US as it is the world's largest producer and exporter of this meat. Of the three billion pounds of turkey meat exported since 2014, 2/3 has gone to Mexico. More than 350,000 jobs and \$22 billion in wages are a part of the industry. About 224 million birds are raised annually with Minnesota being the largest state producer at 40 million birds.

Personal consumption averages 15.3 pounds in the US for a total of 5.1 billion pounds. I can remember when Thanksgiving dinner might have a turkey which was dry and not really that tasty, but the dressing, mashed potatoes, gravy, desserts, pies and visitors made up for the bird tradition. The poultry industry has made huge advances in variety of products developed from turkeys. Today, if you buy a whole turkey, it probably is a hen that will weigh around 15 pounds. Other products such as deli meats, ham, sausage, bacon, hot dogs, tenderloins and cutlets products come from the toms. They weigh in at 38 pounds at 18 weeks of age after consuming 75 to 80 pounds of feed. That is a remarkable feed to weight gain ratio. Their feed is corn and soy beans supplemented with vitamins, minerals and some antibiotics which the industry doesn't care to publicize too much. All in all, it is an extremely efficient process that is controlled by a few huge businesses. For example, Butterball processed one point three billion pounds of turkey in 2019. These businesses are vertically integrated where individual companies produce the feed, own the houses the birds are raised in, process and deliver the products the birds become in addition to all the breeding and growing of them. There are lots of employees, but few owners in such a process. All the more reason to buy locally if the opportunity is available to you.

Higher turkey prices this year are impacted by Highly Pathogenic Avian Influenza (HPAI) that has reduced national poultry numbers by 45 million in deaths and depopulation procedures. These can be small backyard flocks to huge operations where all the birds are killed to prevent further spreading of the disease. There have been cases in Wisconsin with a recent one in Marathon County. Migrating waterfowl are one of the known carriers.

editor

103633 Fence Road

Abbotsford, WI 54405

#### Club contacts

Website: [Chequamegonbirdclub.org](http://Chequamegonbirdclub.org)

Information: [Info@chequamegonbirdclub.org](mailto:Info@chequamegonbirdclub.org)

[Newsletter@chequamegonbirdclub.org](mailto:Newsletter@chequamegonbirdclub.org)

Birdsightings: [connie1@charter.net](mailto:connie1@charter.net)

#### November and December Events

Full moons November 8-Beaver Moon

December 8-Cold Moon

Deer season starts this week

Sandhill cranes to soon move south

Tracking snow is here

#### WHAT IF?

Ben Franklin was a strong advocate to have the turkey rather than the bald eagle be our national symbol. He thought the turkey represented the ideals of our young country better than the carrion eating bald eagle. He was outvoted. If he had won, would we celebrate Thanksgiving with a stuffing stuffed national symbol? Would the turkey industry exist? Just wondering.