

Frequently Asked Questions Regarding Proposals to Open Sandhill Crane Hunt in Michigan

Sandhill cranes are migratory birds -- aren't they protected under the Migratory Bird Treaty Act (MBTA)?

Sandhill cranes are listed as a game species under the MBTA and as such, are given limited protection. Local states have the option of enacting a hunting season for these species. Read a summary of the Migratory Bird Treaty Act [here](#).

I hear that there are too many Sandhill Cranes in Michigan. How many are there?

Estimates of the Eastern Population of sandhill cranes are varied since no statistically-sound surveys have taken place. All efforts to estimate the population indicate that the population is increasing - which is a great success since the species was nearly extirpated from the state less than 100 years ago. The Fall Sandhill Crane Survey, coordinated by the U.S. Fish and Wildlife Service, is thought to reasonably represent a population estimate for the Eastern Population sandhill cranes.

- From the U.S. Fish and Wildlife Service Fall Sandhill Crane Survey 2016:
 - Michigan Population Index: 18,825 *Note: This number is 18% lower than in 2015, but is not statistically different from the five year mean of 20,819 ± 2,558 (+95% CI). The compiler notes that the Michigan population appears to begin stabilizing in 2011.
 - Eastern Population Index: 95,404 *Note: This is a record high number

Increasing numbers are not enough justification to open a hunting season on a species that remains vulnerable after dangerously low numbers less than 100 years ago. This increase in the core population has undoubtedly led to geographic expansion into states where sandhill cranes are still rare or Endangered. In Ohio, for example, where sandhill cranes are State Endangered, the breeding population has increased in recent years and much of this increase has occurred along the northern border, shared with Michigan. There is no indication that sandhill cranes are suffering from overpopulation -- there is no evidence of starvation, disease, or other ecological imbalances.

Will a sandhill crane hunt hurt the population?

Many aspects of sandhill crane biology make the species vulnerable and slow to recover after population loss. Sandhill cranes are long-lived (20 - 30 years) birds that are slow to mature; many individuals do not breed until they are 4 or 5 years old. In addition, pairs mate for life and average less than 1 chick per pair, per season. In fact, studies of breeding populations in Wisconsin estimate a decreased reproductive rate, declining from just under 0.7 chicks/pair in 1992 to under 0.4 chicks/pair in 2006. This means for every two pairs of sandhill cranes, less than 1 chick was produced. No productivity studies have been conducted in Michigan to date. These productivity studies are crucial to building accurate population models to determine the impacts of any reduction in population.

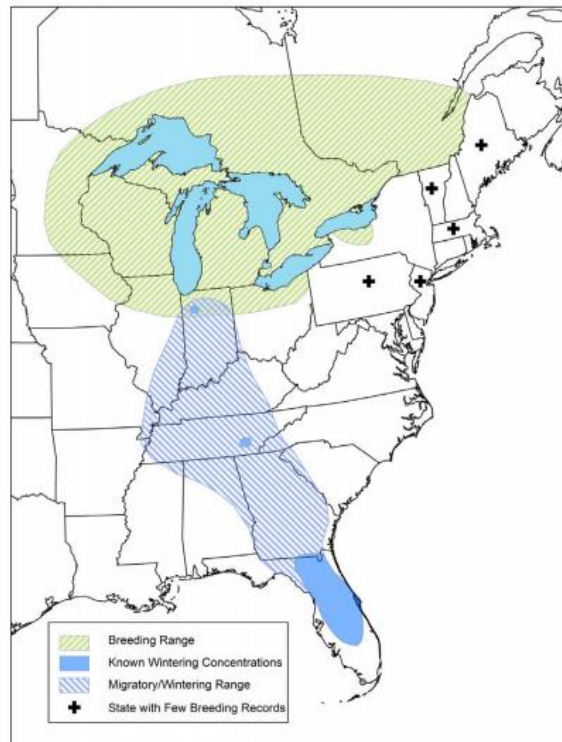
Furthermore, the most recent study by the U.S. Fish and Wildlife Service includes priority research efforts for a hunted population of sandhill cranes, the Rocky Mountain Population. The document states: "For example, their longevity, delayed maturation, and low recruitment may be masking habitat impacts already occurring, further heightening the need to understand impacts of range-wide habitat changes to RMP cranes." This describes several risk factors associated with sandhill crane biology that differentiate it from most other game species. Changes in management can impact long-lived and slow to reproduce species for many generations, and these population shifts can take years to become apparent. Additionally, impacts of management may be compounded with habitat changes, and the

risks associated with a changing climate, especially for wetland-dependent species, are still poorly understood.

Significantly more research needs to be conducted on Michigan's sandhill cranes, including statistically-significant, robust survey methods to get accurate measures of the population.

Are Michigan's sandhill cranes unique? I see sandhill cranes all over the U.S., especially out west.

Yes, Michigan's sandhill crane population is part of a unique flyway population, mostly separate from those to the west. Each of these populations is mostly geographically distinct, but some overlap occurs. This overlap allows some gene flow across the flyway populations. The following map indicates the range of the Eastern Population of sandhill cranes:



The Eastern Population of sandhill cranes has recovered from being nearly wiped out less than 100 years ago. When a population sinks to such low levels, much of the genetic variation is lost, and a bottleneck occurs. As the population grows from such limited genetic variation, it is at a genetic disadvantage and may not be able to adapt as well to threats such as climate change, disease, or environmental stress. A hunt may inadvertently reduce this genetic diversity further, or even eliminate genetically unique populations that still persist. To date, no thorough genetic study of Michigan's sandhill crane population has taken place. One [PhD dissertation](#) that sampled genetic variability across the Eastern Population suggested that "potential harvest should be minimized on breeding areas to reduce loss of private alleles and risk of another population bottleneck" and that "[m]ore observations and research needs to occur on migratory stopover and wintering sites to determine if there is an overabundance from any one breeding site utilizing any one wintering site." We simply do not know enough about the genetic variation and thus the future stability of the Eastern Population of sandhill cranes, to begin reducing the population in Michigan.

Do other states allow sandhill crane hunts?

Yes, the following states allow sandhill crane hunting: Alaska, Arizona, Colorado, Idaho, Kansas, Kentucky, Minnesota, Montana, North Dakota, New Mexico, Oklahoma, South Dakota, Tennessee, Texas, Utah, and Wyoming. Kentucky and Tennessee are the only states that hunt the Eastern Population of sandhill cranes. The 2017 Status and Harvests of Sandhill Cranes reports that total harvests of other populations have increased dramatically from previous years. Analysis of the Mid-continent Population indicates that harvest has been increasing at a higher rate than population growth. For a long-lived, slow to reproduce species such as the sandhill crane, this situation could have long-term impacts.

Wisconsin is currently considering a state sandhill crane hunt as well. The International Crane Foundation, the leading experts on crane research and conservation worldwide, [has determined a sandhill crane hunt to be “not right for Wisconsin.”](#) Michigan Audubon echoes their concerns for Michigan, as well.

Will a sandhill crane hunting season help farmers experiencing crop damage? What can farmers do?

A fall sandhill crane hunt will likely not help farmers experiencing spring crop damage. Furthermore, there are [scientifically proven solutions](#) available to farmers. While it is true that sandhill cranes consume young, germinating corn and winter wheat, there are currently no estimates of actual damage and the cost to Michigan farmers. A [study](#) done by Purdue University found deer to cause the most wildlife damage, by far, to corn crops in Illinois. Sandhill crane damage was not significant enough to have its own category, and was lumped into “other.” No similar studies for Michigan have been conducted to date.

Michigan farmers experiencing sandhill crane damage can apply for a take permit from the U.S. Fish and Wildlife Service, allowing for the farmer to permanently remove the bird(s). Although this is a site-specific solution to the problem, this is likely not an effective solution, as another sandhill crane can easily move into the area. The real issue is that crop fields, especially corn, located close to suitable wetlands where cranes breed and roost, are a desirable foraging habitat. To solve this issue, this habitat must become unsuitable or unavailable to cranes. A relatively new corn seed coating product, Avipel, is available and research shows it is an effective deterrent. Avipel irritates the gut of cranes, but has no long-term negative health impacts on the cranes and is environmentally safe to use. The International Crane Foundation supported the development of this product. Once the cranes learn not to consume the corn, they will remain in the fields but forage on grubs and insects instead. This mutualism is a win-win for cranes and farmers, who will then benefit from free, organic pest control. Avipel is available at \$5 per acre to farmers and is [now being used in Michigan](#). [Learn more about Avipel and crane crop damage](#).

I know conserving habitat suitable for sandhill cranes is expensive. Isn't the best way to raise money for this type of conservation through hunting dollars?

There is no question that hunting-related dollars have had an incredible impact on conservation of all wildlife in Michigan. Duck Stamp sales, Pittman-Robertson taxes, licensing fees, and many other sources have contributed millions to conservation. However, contrary to the number of hunters in the U.S., the number of wildlife-watchers is rapidly increasing and with it, their tourism, equipment, and conservation dollars as well. [As of 2016, wildlife-watchers outnumber hunters 7:1](#). Wildlife-watchers also outspent hunters 3:1 in 2016. Hunting dollars are undoubtedly a driving force in conservation, but current trends suggest more and more wildlife watchers are enjoying non-hunting forms of recreation and these citizens are willing to open their wallets to do so.

Currently there are no estimates of the economic value of a sandhill crane hunt. According to the Tennessee DNR, “the sandhill crane hunt is not a revenue generating hunt.” In [Arizona](#), the Migratory Bird Stamp is \$5.

Tourism associated with the annual sandhill crane migration can be a major economic driver, as demonstrated in Nebraska. A 2017 [study](#) done by the University of Nebraska at Kearney estimates the “overall economic impact of the Annual Crane Migration on Central Nebraska was \$14.3 million in 2017, supporting 182 year-round equivalent jobs. Additionally, that economic impact generated an estimated \$379,000 per year in local property, sales, and lodging tax revenue.” Tourism is Nebraska’s third largest revenue source and tourism activity due to the sandhill crane migration continues to grow over time. Despite many other western states having sandhill crane hunting seasons, Nebraska refrains from opening a season on these birds that are an economic force for the state.

Michigan bird-watchers and wildlife enthusiasts contribute funds to conservation as well. Many are members of multiple conservation groups and some are hunters; these two groups are not mutually exclusive. Bird-watchers purchase Duck Stamps and state Recreation Passes, donate to conservation organizations, and contribute thousands to local economies for lodging, meals, and equipment during their travels.

When is the vote on this issue?

Following the passage of [Senate Bill 1187](#) in December 2016, the Natural Resources Commission has exclusive authority to designate a species as game (excluding mourning doves) in the state of Michigan; no vote by the public is required. The Natural Resources Commission is a politically appointed body which contains no wildlife biologists (view the Natural Resources Commission members [here](#)).

Contact the Natural Resources Commission:

Natural Resources Commission
Cheryl Nelson, Assistant
Phone: 517-284-6237
NRC@michigan.gov

Regardless, it is important to let your legislators know that you oppose the designation of sandhill crane as a game species in Michigan. There is no scientific basis for this decision and there are better, proven solutions to the crop depredation farmers experience. Economically, Michigan could benefit greatly from following the lead of other states and embracing the potential for ecotourism. Please contact your legislators and the Natural Resource Commission members and, politely, let your voice be heard.

Find your House Representative: <https://www.house.mi.gov/mhrpublic/frmFindARep.aspx>

Find your Senator: <http://www.senate.michigan.gov/fysbyaddress.html>

Which bird species currently have a hunting season in Michigan?

There are many opportunities for hunting upland birds and waterfowl in the state of Michigan. The current species list includes: American crow, ring-necked pheasant, bobwhite quail, ruffed grouse, sharp-tailed grouse, American woodcock, rock pigeon, European starling, house sparrow, wild turkey, ducks, American coot, mergansers, geese, Wilson’s snipe, Virginia rail, sora, and gallinules (moorhens).

[Common gallinule is a state threatened species](#) and [sharp-tailed grouse is of state special concern](#), but a hunting season remains in place.

According to the Michigan DNR's website, use of non-toxic shot is required statewide for all waterfowl hunting. Hunters taking ducks, geese, mergansers, coots, moorhens, rails, or snipe anywhere in the state of Michigan may not possess or use shotshells loaded with a material other than non-toxic steel, bismuth, tungsten-iron, tungsten polymer, tungsten matrix, or other shot determined by the FWS to be non-toxic.