

Study: Wisconsin Resident Views on Possible Sandhill Crane Hunting Season

By Ryan Michalesko¹, Paul Robbins², Anne Lacy¹, Rich Beilfuss¹

International Crane Foundation¹, University of Wisconsin-Madison Nelson Institute for Environmental Studies²

Executive Summary

In recent years, the possibility of a hunting season on Sandhill Cranes (*Grus canadensis*) has been a key natural resources issue in Wisconsin. A proposed hunting season was last introduced during the 2022 state legislative session. Though the proposal did not move forward, it has been a frequent topic of legislative hearings and bolstered by proponents. While a hunt has been a recurring topic, it has yet to be understood to what extent the state's residents support or oppose such a concept.

In December 2023, researchers at the International Crane Foundation and the University of Wisconsin-Madison Nelson Institute for Environmental Studies collaborated on a study to better understand Wisconsinites' attitudes towards a hunting season on Sandhill Cranes.

To objectively answer this question, researchers conducted a statewide survey of Wisconsin residents aged 18 years or older to better understand Wisconsinites' attitudes regarding a hunting season on Sandhill Cranes. The survey was administered by the University of Wisconsin Survey Center utilizing the WisconSays panel, which was scientifically designed to represent the state's population as a whole.

Here are the key findings:

- A total of 2,769 individuals completed the survey, constituting a response rate of 78.1%
- Fewer than **7% of Wisconsinites support a hunting season on Sandhill Cranes "a lot,"** and only 17.4% support a hunt at all
- Nearly **half (47.6%) of Wisconsinites oppose a hunt on Sandhill Cranes,** and nearly a third (29.6%) oppose a hunting season on Sandhill Cranes "a lot"
- If a hunting season on Sandhill Cranes was permitted, **less than 5% of respondents indicated that they were "very likely" to participate in a hunt,** while about 80% of respondents indicated that they are "very unlikely" to do so
- When possible hunt participants were asked how much they would be willing to pay for a harvest permit, **a third (33.8%) indicated that they would only be willing to pay \$3,** and another third (31.5%) indicated a willingness to pay \$15



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Background

The Sandhill Crane was found on all the large prairies in Wisconsin prior to European colonization of the state. The population was reduced from “enormous flocks” seen in the 1860-1870 time frame, to be about 25 pairs reported by Aldo Leopold in the wetlands of the central sand counties in 1929 (Hunt and Gluesing 1975). The recovery of Sandhill cranes in Wisconsin is largely attributed to the acquisition of state- and federally-owned wildlife areas in the 1930’s and 40’s when the crane population numbers were low. This, along with a cessation of hunting through enforcement of the Migratory Bird Act of 1916, allowed the population to begin a gradual recovery. The greater Sandhill Crane was removed from the federal rare and endangered list in 1973.

The recovery of the Eastern Population of Sandhill Cranes is due in no small part to these protected wetlands; however, retreating glaciers also left fertile soils that were exposed up to the edges of many of the protected wetlands in east central Wisconsin. It is this combination that is highly correlated with crane presence (Su 2003). As crane numbers recovered in these agricultural areas, reports of crop damage by cranes increased as well.

For over three decades, the International Crane Foundation has worked in these agricultural areas to learn more about their ecology, and how the farming system is impacted by their presence. Through this research, we know that different crane social groups (breeding vs. non-breeding) use fields differently, and that their breeding ecology (long lived, but slow to reproduce) makes them an atypical game bird, and thus, the effective solutions to crop damage inflicted by cranes are not via hunting. In turn, ICF hears often from citizens of Wisconsin that cranes are more valuable to them as objects of observation than hunting quarry. In that light, we sought to determine objectively, what a representative sample of Wisconsinites thought.

Research Partners

This research was initiated and funded by the International Crane Foundation and conducted in close collaboration with the University of Wisconsin–Madison Nelson Institute for Environmental Studies. It was administered by the University of Wisconsin–Madison Survey Center utilizing the online WisconSays Panel.

Methods

This survey instrument was designed by researchers at the International Crane Foundation and the University of Wisconsin–Madison Nelson Institute for Environmental Studies. It was administered by the University of Wisconsin Survey Center (UWSC) utilizing the WisconSays Panel, an online pool of adults aged 18 years and older from Wisconsin who were scientifically selected to provide a study sample representative of the state’s population.

The survey was distributed by UWSC in December 2023, and panelists were allotted approximately two weeks to respond. Participation in this survey and WisconSays was voluntary and confidential. Per the structure of WisconSays, panelists were incentivized to participate through the awarding of points, which can later be redeemed for money.

The UWSC conducted a survey for the International Crane Foundation using the WisconSays Panel. Funded and operated by the UWSC at the University of Wisconsin–Madison, WisconSays is an online, probability-based panel designed to be representative of the Wisconsin household population. Sampling methodology for WisconSays includes randomly selecting households across the state of Wisconsin using area probability and address-based sampling from the USPS Computerized Delivery Sequence File of households in Wisconsin. This ensures Wisconsin households have a known, non-zero probability of selection. These sampled households are then contacted by US mail

to request participation. All sampled households received an initial letter of invitation followed by at least one reminder mailing to non-responders. The panel provides sample coverage of approximately 97% of the Wisconsin household population. Those excluded from the sample include people with P.O. Box only addresses, some addresses not listed in the USPS Delivery Sequence File, and some newly constructed dwellings.

Weighted sampling is often used to ensure representation of some groups within the greater population. It is often necessary that survey data be weighted before they can be used to produce reliable estimates of population parameters. While reflecting the selection probabilities of sampled units, weighting also attempts to compensate for practical limitations of sample surveys, such as differential nonresponse and under coverage. Weighting protocol was developed by the University of Wisconsin Survey Center prior to their release of data to the research team. Design weights were adjusted to the geodemographic distributions of the target population, obtained from the latest *American Community Survey (ACS 2023)*.

Respondent Demographics

Respondent demographic information was collected by the UW Survey Center as part of participation in the WisconSays Panel. The pool of respondents for this survey:

- Nearly evenly split between males (47.2%) and females (52.8%)
- 83.4% of individuals identified as white, while 16.6% identified as non-white
- 47.5% of respondents identified as a Democrat, 37% as a Republican, and 14.9% as Independent or something else (*Figure 1.1*)
- The median household income of respondents was determined to be between \$80,000 and less than \$90,000 (*Figure 1.2*)

- The median age of respondents is between 45 and 54 years
- 31.6% of respondents indicated that their highest level of education was a high school diploma or equivalent (such as GED)
- 11% of respondents have completed an Associate’s degree, and 22.4% a Bachelor’s degree, 6.4% a Master’s degree. Only 2.9% of respondents have completed an advanced degree such as a medical degree, law degree, or Ph.D (*Figure 1.3*)

Hunter Demographics

Of the total response pool, 25.2% indicated that they had gone hunting in the last five years, and 10.4% of respondents indicated that they went hunting “very often” or “extremely often.” Among those who said they hunted at any level (696 individuals):

- Deer was the most popular game, where 81.7% (571 individuals) hunted deer in the last five years
- The second most popular game species was Turkey with 35.2% (244 individuals) of hunters, followed by Waterfowl with 21.2% (148 individuals)

Figure 1.1: Respondents by Political Party Affiliation

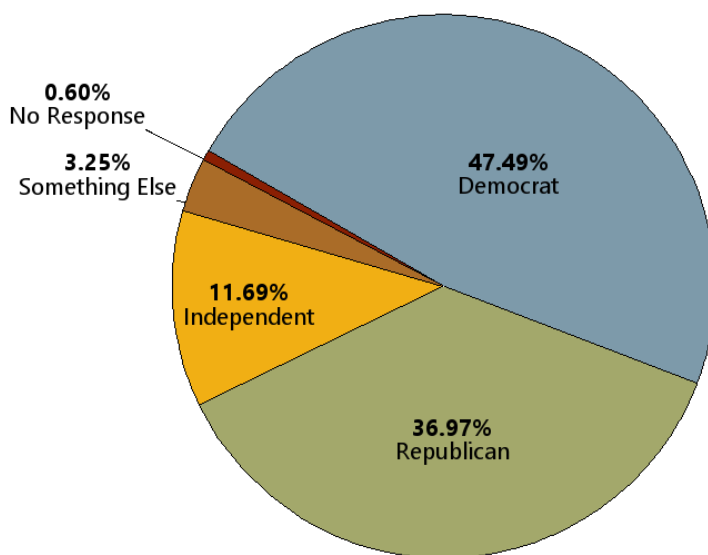


Figure 1.2: Respondents by Total Household Income

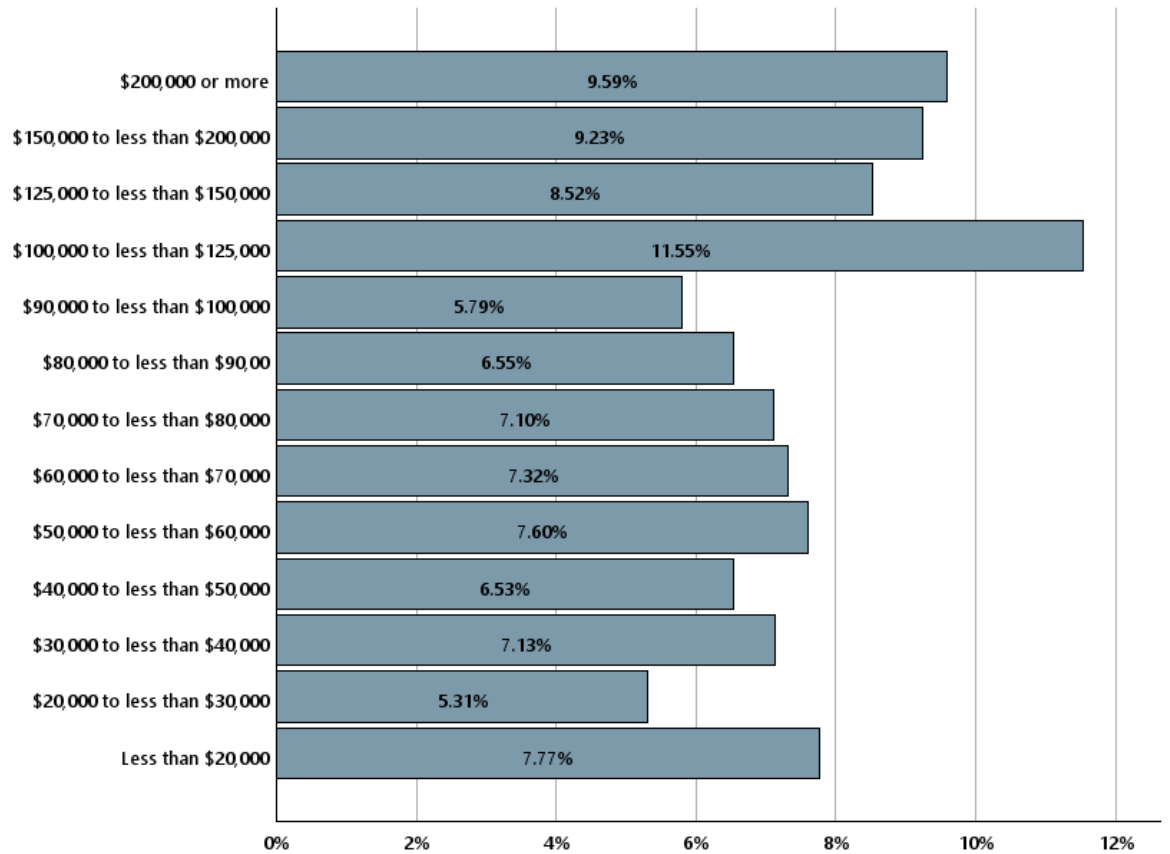
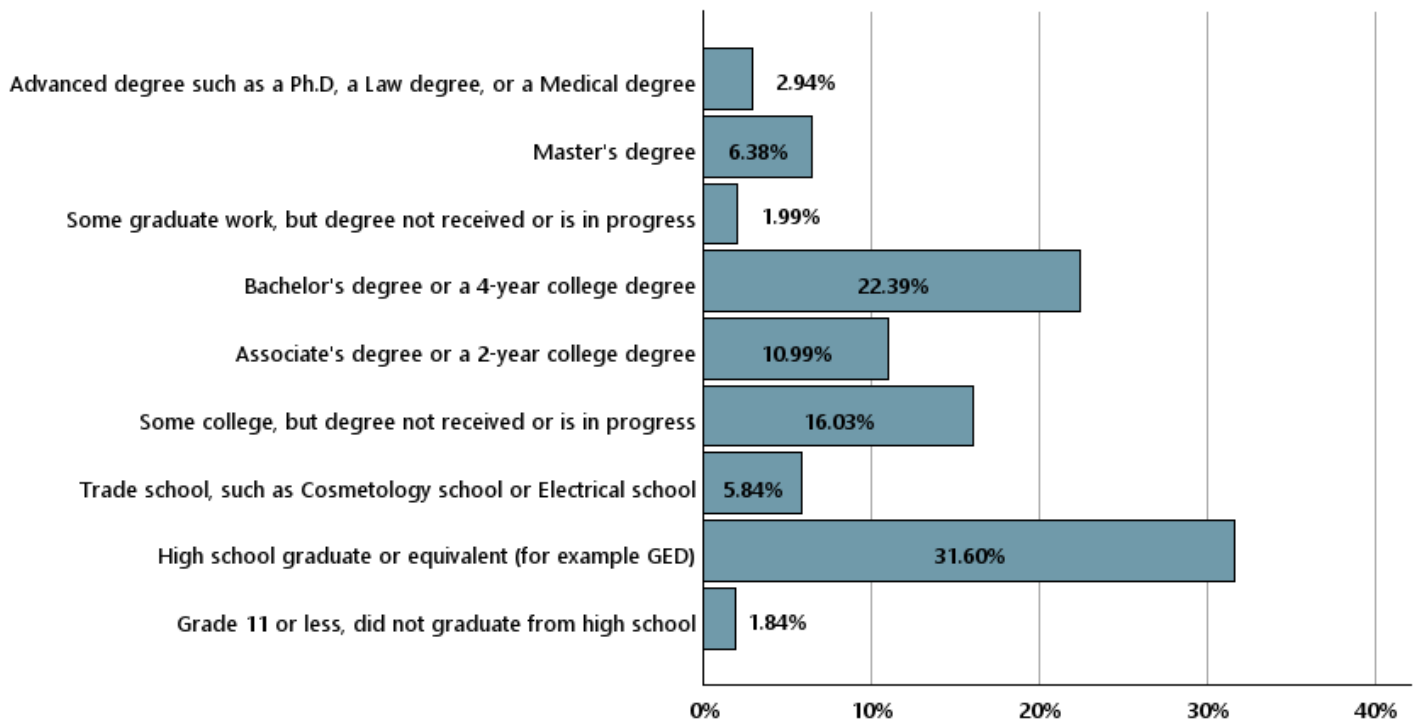


Figure 1.3: Respondents by Highest Education Level Completed



Support for Sandhill Crane Hunting Season

Respondents were asked to identify the extent to which they support or oppose a hunting season on Sandhill Cranes in Wisconsin. Of the total response pool, fewer than 7% of Wisconsinites support a hunting season on Sandhill Cranes "a lot," and only 17.4% support a hunt at all. Nearly half (47.6%) of Wisconsinites oppose a hunt on Sandhill Cranes, and nearly a third (29.6%) oppose a hunting season on Sandhill Cranes "a lot."

While some may support a hunting season on Sandhill Cranes, we also sought to determine how many individuals would participate in a hunt. When asked whether they would hunt Sandhill Cranes if permitted, nearly 80% of respondents indicated they are "very unlikely" to do so.

Figure 2.1: To what extent do you support or oppose a hunting season on Sandhill Cranes in Wisconsin?

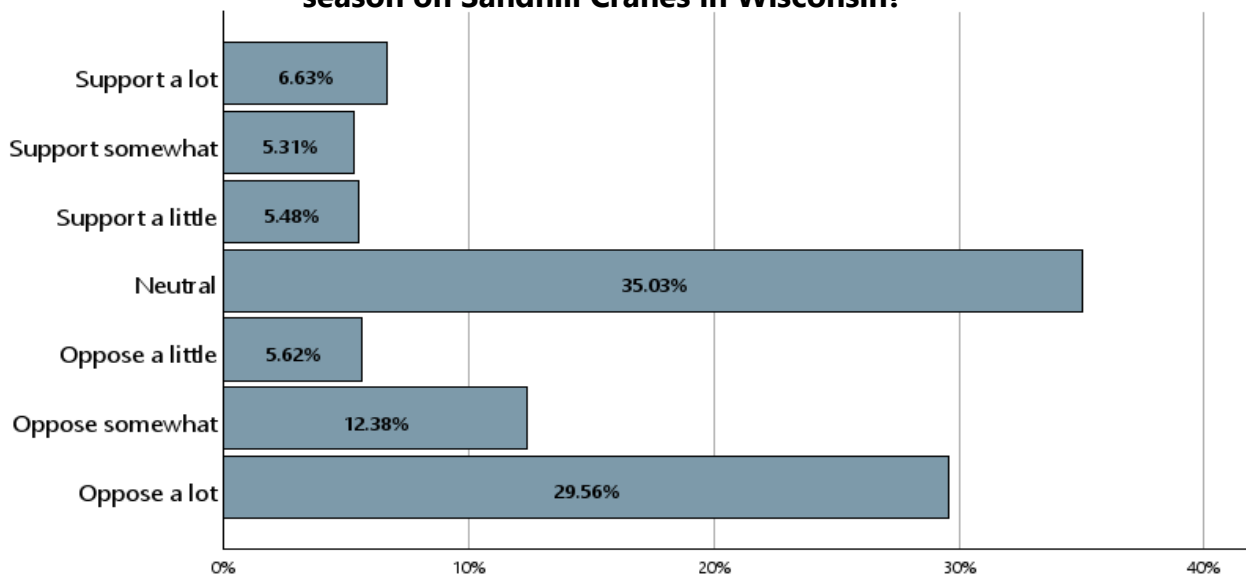
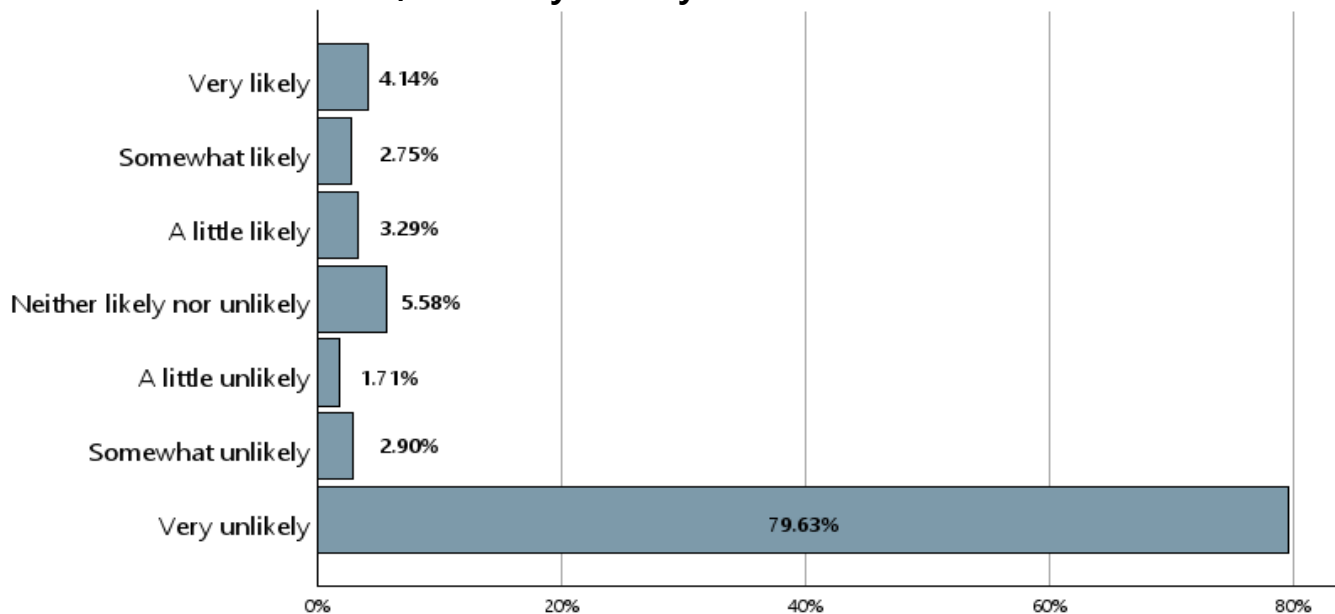


Figure 2.2: If a hunting season for Sandhill Cranes was permitted in Wisconsin, how likely would you be to hunt Sandhill Cranes?

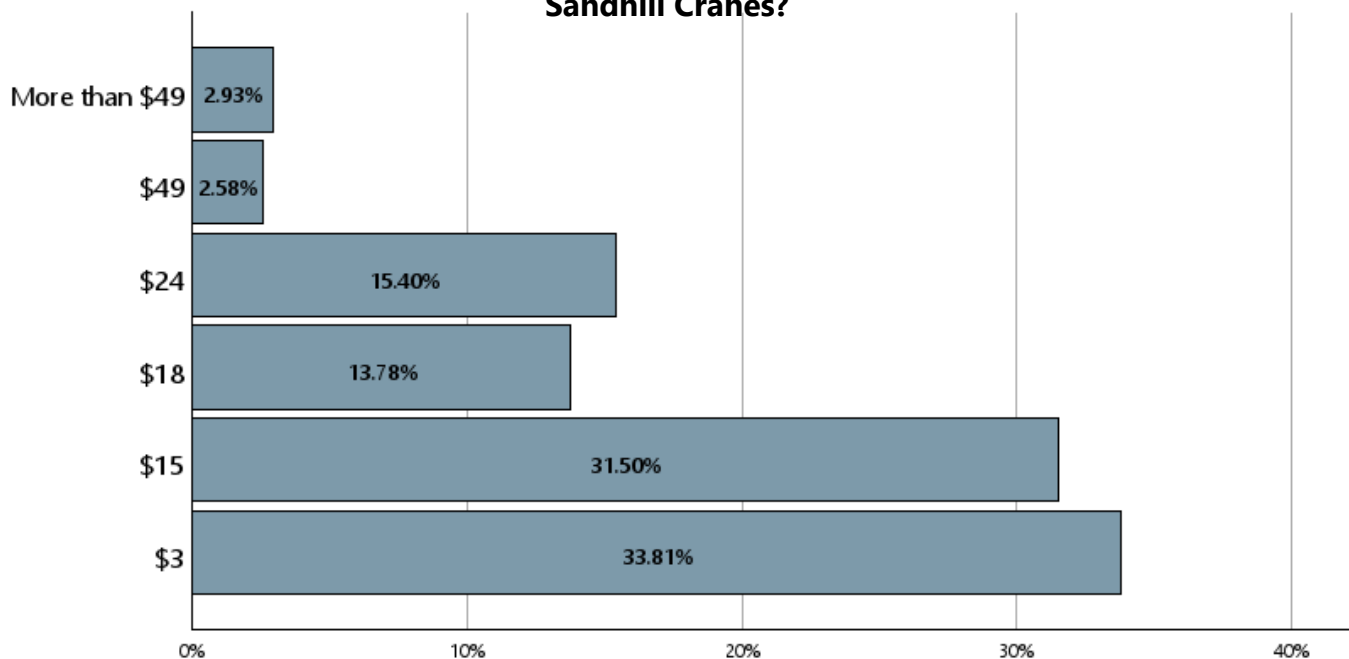


The Cost of a Sandhill Crane Hunting Season

When asked how likely they would be to hunt Sandhill Cranes if permitted, about 80% of respondents indicated that they were “very unlikely” to do so. A subgroup of 20% (564 individuals), who did not answer “very unlikely” to the possibility of hunting Sandhill Cranes, were asked what they would be willing to pay for a permit should a hunting season be permitted. About one third of said subgroup (191 individuals) indicated they would only be willing to pay more than \$3 for a permit, and another third (177 individuals) would pay more than \$15 (Figure 2.3).

In 2021, when a hunting season was last proposed by the Wisconsin state legislature, a total application fee to hunt Sandhill Cranes was identified as \$10 in a Department of Natural Resources’ fiscal estimate (2021). A surcharge of \$2 per application was to be earmarked to the wildlife damage abatement program. The remaining \$8 would be utilized by the Department to implement and administer the program. Even if 5,000 Sandhill Crane permits were sold (likely an overestimate of what would be permitted by the U.S. Fish & Wildlife Service), only \$10,000 in revenue would be generated to fund crop damage abatement/compensation. This constitutes a mere 0.63% of the funds necessary to resolve the \$1.6-million in crop damage complaints that could be filed annually, as estimated by the fiscal estimate.

Figure 2.3: If a hunting season for Sandhill Cranes was permitted in Wisconsin, how much would you be willing to pay for a permit to hunt Sandhill Cranes?



References

Hunt, R. A. and E. A. Gluesing. 1975. A preliminary report on the Sandhill Crane in Wisconsin. Proceedings of the International crane workshop, Baraboo, Wisconsin

Su, L. 2003. Habitat selection by Sandhill Cranes, *Grus canadensis tabida*, at multiple geographic scales in Wisconsin. PhD dissertation, University of Wisconsin – Madison. 141 pp.

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