



INTERNATIONAL CRANE FOUNDATION

*Inspiring a Global Community*

## *Citizen Science in Action*

### *2010 Annual Midwest Crane Count*

Each year, ICF's Field Ecology Department hires interns to work on the long-term study of the population and behavioral ecology of Greater Sandhill Cranes in Wisconsin. In 2010, Forrest East and Kristin Norris became ICF interns and studied the foraging ecology, spatial movements, and social behavior of breeding and non-breeding cranes in central Wisconsin through radio-tracking and direct observation. Both Forrest and Kristin completed projects during their internship that used the important 2010 Annual Midwest Crane Count data.

Learn more about the Crane Count at [www.cranecount.org](http://www.cranecount.org) or contact the ICF Crane Count Coordinator at [cranecount@savingcranes.org](mailto:cranecount@savingcranes.org) or (608) 356-9462.

- **2010 Intern Project Summary by Forrest East**

I will start this article with a thank you. Thanks to you all, the volunteers and coordinators both new and old that have put forth the time to accumulate such a comprehensive dataset; my own efforts would not have been possible without it. It would be a disservice to discount the magnitude of what you have helped to accomplish. A dataset such as the one the Annual Midwest Crane Count provides is hard to come by in the scientific world. It is quite literally massive in its detail and breadth and opens avenues of study that would not otherwise be realistically possible.

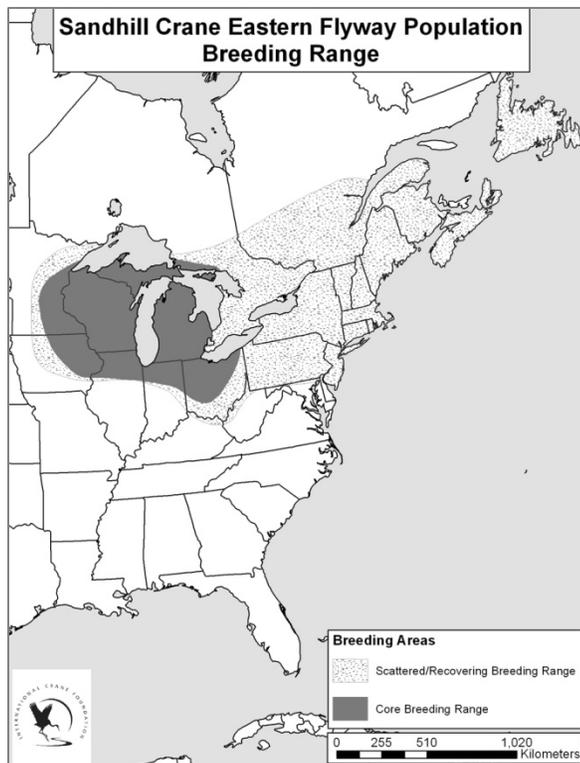
I am assuming that most of you reading this know the Annual Midwest Crane Count to be a means of estimating the Eastern population of Sandhill Cranes. For the purposes of my study, while the estimation of the population is important, what made the Annual Midwest Crane Count unique was its spatial component, that is to say, it not only gives us an idea of how many birds there are, but also where they are and at what concentration. **The aim of my project was to determine how in Wisconsin the population of Sandhill Cranes was changing – which areas were growing, which were shrinking, and which were just fluctuating around the same number.** At the end of the project, I found

evidence to support (and please don't underestimate the choice of words) that the areas with the highest concentration of Sandhill Cranes, near the central Southeast section of the state, showed no statistical difference over the selected time period; however, the study also confirmed that the overall population in Wisconsin was statistically increasing. When broken down into regions, the areas that were significantly increasing were primarily located in the Northwest section of the state.

These results are only a small part of what Crane Count can show us. With just the accumulation of time, the tallying of both numbers and pairs, and the distribution of counting sites, several aspects of these animals remain to be explored on a population scale. When combined with datasets such as landcover, human expansion, or weather patterns, the significance and usefulness of the Annual Midwest Crane Count become even more apparent. As a closing word I would just like to encourage all those involved to be patient and persistent; studying complex and longer lived animals such as these takes time and it is with your efforts that we are able to do so to the degree that we have.

- **2010 Intern Project Summary by Kristin Norris**

The breeding, wintering, and migrating range of the Eastern Migratory Population (EMP) of Greater Sandhill Cranes (*Grus canadensis tabida*) is located within the Mississippi and Atlantic Flyaway. Historically, the majority of the Eastern Population bred across the Great Lakes Region (primarily Wisconsin, and Michigan) and wintered in southern Georgia and Florida (Ad Hoc Eastern Population Sandhill Crane Committee 2009\*). In the 18<sup>th</sup> and 19<sup>th</sup> centuries, this subspecies was nearly extirpated (Walkinshaw 1949, 1973; Leopold 1949), with only 25 breeding birds left in Wisconsin in the 1930s (Henika 1936). Over the years, hunting regulations and the protection of the species has allowed the population to increase to a level that exceeded 30,000 birds by 1996 (Meine and Archibald 1996). The population is currently expanding (Su et al. 2004) and re-colonizing in former breeding and wintering areas (Meine and Archibald 1996, Melvin 2002, McGowan 2003).



**The purpose of my project was to delineate the expansion of the EMP by developing an updated breeding (left) and wintering range map for the subspecies.** Our focus was on how the wintering and breeding patterns of this population has changed and expanded over time. We accomplished this by collecting and mapping data from the Midwest Annual Crane Count, Christmas Bird Count, USGS Breeding Bird Survey, and personal communication with regional crane experts. Due to the expansion of this subspecies, there have been issues regarding Sandhill Crane crop depredation and an increased interest to hunt Sandhill Cranes. It is important to continue these Crane Counts, with the help of thousands of volunteers, so that ICF can properly monitor the

distribution and abundance of EP in the Midwest. Measuring the increase or decrease of the subspecies population is an important step in fine-tuning future management plans.

*\* References available upon request*

### **Sandhill Crane Hunting Update by Anne Lacy, Long Term Crane Research Coordinator**

In the fall/winter of 2010, Minnesota had its first crane hunting season. This population, part of the mid-continent migratory population, is separate from the Eastern Greater Sandhill Crane Population that breed in the upper Midwest. We do not know the results of this season, but Minnesota Audubon is concerned that permission to go forward with a season was not given adequate public input into the process.

Currently, Tennessee and Kentucky are actively pursuing a potential hunting season for Sandhill Cranes. Tennessee Wildlife Resources Commission voted in January 2010 to delay a proposal to hunt cranes in that state for two years. It was agreed by all parties involved in this process that more information was

needed before they could make a decision. The proposal by Kentucky is under development now. ICF is actively involved in both states to ensure that current and correct scientific information is available for all decision makers. It is through the active participation of both crane lovers and wildlife professionals that we are able to do this. Counting cranes every spring in the Upper Midwest does not contribute to information that may give hunters an advantage in hunting these birds, should that ever be the case. Rather, the enormous body of work that is the Annual Midwest Crane Count is a priceless dataset that is helping to inform all of us about these magnificent birds. For example, this data is being used to not only inform people on the successful expansion of these birds into historical breeding areas, but also to help the reintroduction of the endangered Whooping Crane.