Long-billed Curlew Surveys in the Mission Valley, 2014

Amy Cilimburg and Janene Lichtenberg lead field trips in the Mission Valley, talking about Curlews!

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Overview and Thank You
This report summarizes the efforts of Montana Audubon, Salish Kootenai College (SKC), Confederated Salish and Kootenai Tribes (CSKT), Audubon Chapters, local landowners and birders, and the Owl Research Institute to survey for Long-billed Curlews in the Mission Valley. This work is instrumental to the ongoing, collaborative efforts of partners to conserve grasslands and agricultural lands and other birds in this area.

And we extend a heartfelt THANK YOU to all those who volunteered to conduct surveys for Curlews or who sent us your Curlew sightings. You stepped up! We offer a special thank you to SKC student Kenneth Edmo for surveys and data entry, and to the CSKT biologists for partnering with Montana Audubon on this project.

Background
Over the past few years, avian conservationists, biologists and managers have been interested in advancing grassland and open lands conservation opportunities across Montana. A few years ago, Montana Audubon attended a meeting with many of the best avian conservationist around—members of “Montana Bird Conservation Partnership” (MBCP)—to figure out how we could all work together to “move the needle” on grassland habitat conservation. After much brain-wrangling, we decided we needed a mascot—a bird that lives throughout the State, is charismatic and recognizable, and of course, needs grasslands. We landed on the flashy and vocal Long-billed Curlew! Then we began making plans for a collaborative effort to use this the curlew to help conserve specific grasslands. After much discussion, key MBCP members decided that the Mission Valley was a great place to begin this conservation effort, with Curlews as our focal bird. In the Mission Valley we have great partners, curlews a plenty, and lots of opportunities for conservation.

Sightings of curlews over the years have been reported to the Montana Natural Heritage Program, our state library for biodiversity data. They have used these data to create models of where we are most likely to find curlews across the state. As we assessed maps of the Mission Valley, we realized it would be very helpful to update these maps with more information about this fanciful bird so that we could better locate hotspots which can guide conservation priorities. We also interested to know more about its nesting and feeding habitats.

Working with our CSKT and SKC partners, and also the local NRCS folks and others, we created brochures to help folks understand more about the Long-billed Curlew. We also created and passed out postcards so if people find a Mission Valley curlew, they can let us know. Finally, we developed an on-line mapping tool as a pilot but this proved less than intuitive and volunteers preferred postcards or phone calls. All this remains accessible from Audubon’s website:

We created maps of over 20 road-based survey routes. These are driving routes of at least 10 stops, each ½ mile apart. We developed a simple protocol, with surveyors stopping for 5 minutes to look and listen for curlews at each stop (see map, page 4). We also provided standardized data forms. Via outreach to Audubon Chapter members, and through the efforts of a variety of partners in the Mission Valley, we found plenty of enthusiastic volunteers to run our curlew surveys. Again, SKC students and CSKT biologists were invaluable surveyors.
About the Long-billed Curlew:
The Long-billed Curlew, a bird of grasslands and prairies, is actually North America’s largest “shorebird”. Like many other grassland species, numbers have declined across its range during the past few decades, as suitable nesting and winter habitat has been converted to other uses. Recent Breeding Bird Survey (BBS) data indicate a significant downward trend for North America as a whole. Because of these trends and concerns, the Long-billed Curlew is on ABC and Audubon’s Watch List, is a U.S. Fish and Wildlife Bird of Conservation Concern, and is considered a sensitive species by the BLM and a species of concern for the State of Montana (S3B). Habitat conversion has been a primary factor in these declines, especially across the Great Plains, as native grassland habitats were converted to cropland. As Urban/suburban growth and energy development have also replaced, altered and fragmented habitat.

In the Mission Valley and surrounding areas it appears we have many curlews, and we are focused on keeping it this way. Good grassland conservation combined with specific agricultural practices can help this bird and many other grassland critters.

The Curlew’s breeding and summer range consists of grasslands from Texas into southwestern Canada. They winter along the Pacific coast from California through Central America. Spring migration to breeding grounds begins in March. Fall migration south to winter grounds begins in late July (see map, above).

What did we find?
During the spring of 2014, 21 individuals completed at least one survey route. Some routes were done solo, some with a small team. Surveys were conducted between April 22 and May 31. Twenty-seven routes were run, for a total of 344 points.

Long-billed Curlews were detected at 50 points, for a total of 70 individuals (multiple individuals were detected at some points). We also had a number of curlews reported either by local birders, land owners, or as survey “incidents” (curlews seen during the survey count but between points or for which we do not have spatial location). See map, next page.

We also found a total of 38 “incidental” birds, and for 17 of these we have good spatial data. Matt Larson from the Owl Research Institute shared with us the spatial data for 2 Long-billed Curlew nests. All together over 100 Long-billed Curlews were detected during the season.
Figure 1. This map shows that routes that were run during April 2014. The yellow dot indicates that at least one curlew was found at one point along the route.
**What’s next?**
We are excited to survey again in 2015, and will once again rely on volunteers from Audubon Chapters and other Mission Valley and western Montana residents. We hope you will join us and pass the word to your friends and colleagues.

For this season’s efforts we have created a website that provides information on these Long-billed Curlew Surveys, shows the routes available (so we spread the effort out geographically and over time). You can download the maps, protocol and data forms, and can easily sign up for a route (or 2 or 3!).

The website is: [missionvalleycurlews.weebly.com](http://missionvalleycurlews.weebly.com). It is a work in progress.

One change for 2015: We are hoping to surveyors will mark the bird’s location directly on a map – the closer we can get to exactly where the bird was detected, the better. If surveyors do not have a map, the more detail the better, so we can “pin” the bird to a spot. This will help us understand what habitat conditions work for curlews.

After the 2015 survey season, we will share all these data and findings with CSKT biologists. And we will share these findings with biologists at the Montana Natural Heritage program so they can update their habitat models, helping us to find the curlew “hotspots”. We can use such hotspots to focus our outreach and conservation efforts moving forward.

If you have questions or ideas, please don’t hesitate to get in touch.

Thank you, Amy and Janene