This year, 20 volunteers scoured the Mission Valley along 22 driving routes to locate North America's largest shorebird (curlew by Raylene Wall above left). Gail and Mitch Linne (pictured above) survey along Niarada Route 1. They located 3 curlews, including 2 in Brown’s Meadow (above right.) 76 total curlew sightings were reported this year!

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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 volunteers to survey for Long-billed Curlews in the Mission Valley. Long-billed curlew monitoring is instrumental to the ongoing, collaborative efforts of partners to conserve grasslands and agricultural lands and other birds in this area.

We extend a heartfelt THANK YOU to everyone that volunteered to conduct surveys or took the time to send in your Curlew sightings. You stepped up! We offer a special thank you to CSKT biologist Kari Eneas, Sherry Ritter, and Ben and Christine Deeble for the large efforts they put forth this year, and for collaborating 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 thought, 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 visible and vocal Long-billed Curlew! Then we began making plans for a collaborative effort to use the curlew to help conserve specific grasslands. Key MBCP members decided that the Mission Valley was a great place to begin this conservation effort, with Curlews as a focal bird species. In the Mission Valley we have great partners, curlews a plenty, and a lot of conservation opportunity.

Since before the 1970’s there has been over 4,100 curlew sightings reported to the Montana Natural Heritage Program, our state library for biodiversity data. These data have been used to create models that predict where curlews are most likely to find across the state. In the Mission Valley, a lot of grassland habitat is predicted to be of high quality to curlews, and we realized it would be helpful to update the maps with local information so that we could locate “curlew hotspots” capable of guiding conservation priorities. We also wanted to know more about the curlew’s nesting and feeding habitats, and the timing of these activities.

Working with our CSKT and SKC partners, local Natural Resources Conservation Service (NRCS) folks and others, we created brochures to help folks understand more about the Long-billed Curlew and healthy grasslands, and a website to help guide volunteer surveyors and individuals wanting to report curlew sightings. This information and more about curlew conservation is located on Montana Audubon’s website at http://mtaudubon.org/birds-science/long-billed-curlew-initiative/.

25 road-based survey routes now exist in the Mission Valley and Flathead Indian Reservation. These are driving routes of at least 10 stops, each ½ mile apart. There is a simple protocol, with surveyors stopping for 5 minutes to look and listen for curlews at each stop (see map, page 4), and standardized data forms. Via outreach to Audubon Chapter members, and through the efforts of a variety of partners in the Mission Valley, we found many enthusiastic volunteers to cover curlew surveys. In 2017 CSKT biologists and local Audubon chapter members were been invaluable to this effort.
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. 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).

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 the American Bird Conservancy and National Audubon’s Watch List, is a U.S. Fish and Wildlife Bird of Conservation Concern, is considered a sensitive species by the Bureau of Land Management, and a species of concern for the State of Montana (S3B). It is also a priority of the U.S and Canada Shorebird Plan.

Habitat conversion has been a primary factor in these declines, especially across the Great Plains, as native grassland habitats were converted to cropland. Urban and suburban growth and energy development have also replaced, altered, and fragmented habitat.

In the Mission Valley and surrounding areas we have many curlews, and we are focused on keeping it this way. Targeted grassland conservation combined with specific agricultural practices can sustain curlew populations and other grassland dependent wildlife.

What did we find?

During the spring of 2017, 19 individuals surveyed stops along 22 routes. Some routes were done solo, and some with two surveyors. Surveys were conducted between April 8th and May 31st and a total of 432 points were surveyed.

Long-billed Curlews were detected at 44 points, adding up to a total of 74 individuals (multiple individuals were detected at some points). See map, next page. We also had 2 curlews reported as survey “incidentals” (curlews seen during the survey count but between points or for which we do not have spatial location data).

We also collected 476 incidental observations for 55 species including evidence of breeding Short-eared owls and Northern Harriers. These data have spatial information as they were collected alongside of the curlew data.
Figure 1. This map shows routes run between 8 April 2017 and 31 May 2017. The yellow dot indicates that at least one curlew was found at that stop.
What’s next?
We are excited to survey again in 2018, and will once again rely on volunteers from Audubon Chapters, CSKT, SKC College, and other Mission Valley and western Montana residents. We hope you will join us and pass the word to your friends and colleagues. We are actively pursuing funding to support the Mission Valley Conservation Partnership.

For the 2018 season’s efforts we will continue to use a specially designed website that provides information on Mission Valley Long-billed Curlew Surveys routes, shows routes (so we spread the effort out geographically and over time), and allows you to download maps, protocol, and data form.

The website is: missionvalleycurlews.weebly.com.

One change for 2018: In addition to hoping surveyors continue to mark the bird’s location directly on a map – we are asking folks to record the number of Sandhill Cranes spotted to get a better idea of their use of the Mission Valley.

These data and findings have been shared with CSKT biologists and biologists at the Montana Natural Heritage program so they can update curlew habitat models, refining curlew “hotspots”. We 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.