NGPJV Conservation Guidance Web Tool User Guide

Map Tool Web Address:

https://duinc.maps.arcgis.com/apps/webappviewer/index.html?id=262567b2c6774a65bb1debe70acd0f3d

The NGPJV developed a spatial planning web tool to help producers and conservation practitioners better understand and visualize conservation opportunities and challenges. It is our hope that knowing and seeing more information about the land you are managing may help to inspire the use of various conservation practices and approaches needed to achieve desired producer and habitat objectives. Please review the tutorial to help you navigate the Web Tool. The tool focuses on the five priority species of the Joint Venture: chestnut-collared longspur, thick-billed longspur, lark bunting, Baird's Sparrow, and Sprague's pipit.to help producers and conservation practitioners better understand and visualize conservation opportunities and challenges. It is our hope that knowing and seeing more information about the land you are managing may help to inspire the use of various conservation practices and approaches needed to achieve desired producer and habitat objectives. Please review the tutorial to help you navigate the Web Tool. The tool focuses on the five priority species of the Joint Venture: chestnut-collared longspur, lark bunting, Baird's Sparrow, and Sprague's pipit.



When you get to the site, you should see something like the map below.

Note that, in the upper left corner there is an icon that will allow you to look at the Legend 🔚 a

another icon that will allow you to select from the **Layer List** . Click on each of the icons to see what they do. Click on an icon a second time to close again it.

The legend is pretty straight forward, so let's focus on the Layer List. When you select the icon, you should see something like the following image pop up on the left side of your screen.

Note that you can select each individual layer by clicking on its box. You can open each entry by clicking on the carrot ▶ symbol on the left to see additional information about the layer. An explanation of each layer follows to help you study them. Note as well that if a polygon (i.e. county) is selected for any of the generated maps, a host of related data and charts can be viewed, often multiple pages. Just click on a county and scroll through the data in the popup box that appears.



Each Layer in Detail

Ranked Importance of County to Species

This layer depicts the relative importance for the five JV priority grassland birds for the given county based on a combined rank at the entire JV level. In other words, each species was ranked based on its occurrence in a county and then scores for the five priority species were amalgamated into a single county score. The idea is to display the relative importance of counties for a combination of the five species. State ranking followed the same process but considers the relative importance of a county for the five species only within the state. If you click on a county, more information is displayed about the state and JV ranks for each species. You should see a pop-up like this. A score of "99" means the species is not considered present in that county.

Ranked Importance of County to Species State Dekote County Sioux 38085 FIPS Joint Venture Chestnut-collared 3.00 Longspur Rank State Chestnut-collared Longspur 1.00 Rank Joint Venture Thick-billed 99.00 Longspur Rank State Thick-billed Longspur Rank 99.00 Joint Venture Sprague's Pipit 21.00 State Sprague's Pipit Rank 9.00 Joint Venture Baird's Sparrow 11.00

NGPJV Tillage

The next three layers relate to the relative need for either land management, restoration, or protection based largely on cropland, rangeland, and overall intactness. If you select all three layers at the same time, you can see some overlap, but you may have to move the layers around (move them by

clicking on the ... symbol on the right and selecting move up or move down). This will change the order in which the colored circles "stack."

NGPJV Tillage – Manage

These are areas of recently converted land now in perennial cover (includes CRP, in part). The counties on this map with the largest circles indicate those in greater need of management types of conservation actions. Conservation attention should be focused on those soils most likely to be replanted to crops. Conservation options include replanting native vegetation and adding (or improving infrastructure) to encourage use as managed grazing land. Prescribed fire may also be appropriate. Clicking on a circle in a county in this layer will display details about the county; of particular importance are the acres shown as "Manage" (sometimes referred to as enhance).

NGPJV Tillage – Restore

These are areas exhibiting cultivated cropland on less productive soils. The counties on this map with the largest circles indicate those in greater need of restoration types of conservation actions. Conservation attention should focus on restoring the native plant community and installing infrastructure that facilitates managed grazing systems. Clicking on a circle in a county in this layer will display details about the county; of particular importance are the acres shown as "Restore."

NGPJV Tillage – Protect

These are areas exhibiting at risk yet intact grasslands. The counties on this map with the largest circles indicate those in greatest need of protection types of conservation actions. Untilled land on more productive soils adjacent to cultivated cropland should receive the most attentions. Conservation attention should focus on long-term protection strategies like easements, long-term contracts, CCAAs (where available) and other measures that keep the land in native vegetation and ranching. Of course, measures that encourage managed grazing are also important. Clicking on a circle in a county on this layer will display details about the county; of particular importance are the acres shown as "Protect."

Crop Data

This layer depicts the relative density of cropland, which may also help you select practices that appropriate for desired conservation outcomes. Darker colored counties have more cropland. The layer may also be used to convey that certain counties in highly fragmented landscapes may be of high value for conservation due to their relative rarity and/or vulnerability to conversion. If you click on a county

you will display a lot of information about various crops and other cover types in the county. A pie chart at the bottom of the pop-up will show the acres in terms of medium and low intensity development and open space.

Land Stewardship

This layer depicts the relative amount of private lands in the county. The darker the polygon, the greater proportion of private lands. The pop-up shows more detail about land ownership and a pie chart provides a snapshot of the proportions of private, state, and federal land ownership in the county.

County Human Populations

This layer is simply the human population by county. Darker means more people. Human populations are important in conservation because more people bring more pressures on the land yet potentially more resources for conservation.

Total CRP Expirations by Year

This layer displays the relative number of acres enrolled in CRP in 2020 by county. The pop-up provides a lot more information about the amount of CRP enrolled as of 2020 and how it declines through 2030 (which may be impacted by new enrollments at some point). The line graph at the bottom of the pop-up shows how each county will decline and how urgent it is to do something about the loss of these grassland acres.

Wetlands by County

This layer shows the relative wetland acres by county. For map view, we removed lake data because including them makes the map tells more about where the major rivers/reservoirs are and less about the abundance of other wetland types. When you click on a county, the pop-up will provide a lot more detail about each wetland type, including lakes. The pie chart at the bottom offers another quick snapshot of these data. *This layer does not yet include Montana*, but we are working to add those data. Not surprisingly, the NGPJV doesn't have a lot of wetland resources and many are associated with riparian areas. Wetlands are both scarce and vital.

N-GRIP Priority Counties

This layer shows the priority counties that have been identified for the Northern Grassland Restoration Incentives Program (N-GRIP) managed by the NGPJV. The green counties have been identified as our highest priority for restoration and management through N-GRIP while the yellow counties are of medium priority.

Other Helpful Information

• <u>Rangeland Analysis Platform</u> – A new technology that makes it possible to quantify the value of rangeland conservation in dollars and cents.