May 2023

SAGE NEWS

Baker Sage-grouse LIT Newsletter

Spring is in the air!

We are looking forward to yet another season of sagebrush restoration!

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Greater Sage-grouse know how to dance!

During the spring breeding season, male birds will gather at lek locations to strut, fan their feathers and inflate bright yellow throat sacs while making a popping sound -- all with the hope of attracting a female. These birds definitely know how to jive!

Important Dates:

- **May 17th:** Baker LIT Technical Review Team (TRT) Meeting
- **May 31st:** Baker LIT Summit
- **July 7th:** Land Planning & GIS workshop
- **August 1st:** Baker LIT Quarterly Meeting

May 2023

MESIC HABITAT RESTORATION

The Baker LIT is working towards identifying and improving mesic resources for sage-grouse during the late brood-rearing period. If you have streams and/or springs that need restoration or protection on your property and you think you are located within sage-grouse habitat, please reach out to Morgan Solomon, the Baker LIT Sage-grouse Coordinator!

Mesic resources such as streams, creeks, springs, and meadows play a vital role in sagebrush ecosystems. Healthy mesic resources act as diversity islands in the sagebrush sea and provide a wealth of resources for wildlife including food, water, and refuge. In particular, greater sage-grouse rely heavily on moist environments during late summer months. As upland areas begin to dry out, mesic lowlands will retain their moisture and serve as a one-stop "grocery store" for brooding hens and their chicks. Mesic areas provide succulent forbs and an abundant source of insects vital to promoting the growth and survival of newly hatched chicks.

Figure 1. Healthy mesic area.
Photo credit: https://www.wlfw.org/tag/wet-meadows/

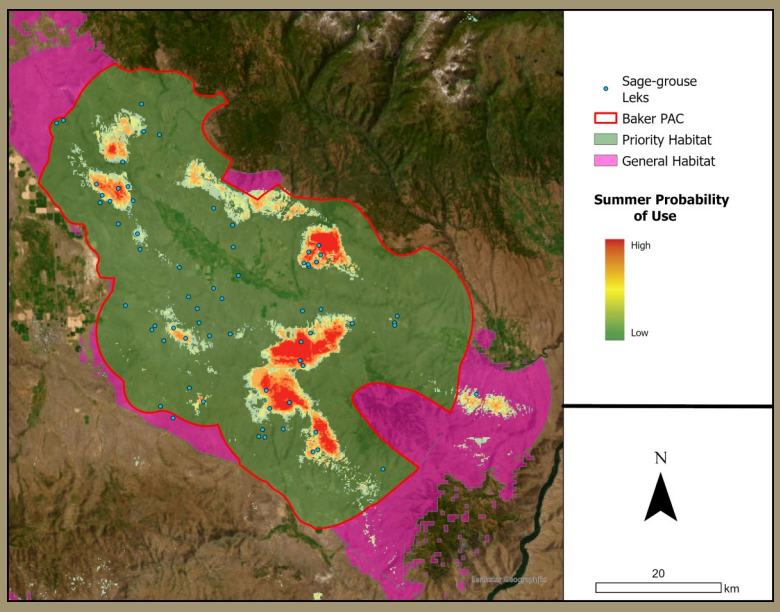

Figure 2.Map depicting areas of potential brood habitat within the Baker PAC.

Currently, the Baker LIT and partners are working to use pre-collected field data and maps depicting brood habitat to identify and prioritize mesic areas for protection and restoration across both private and public lands. Through this process, we hope to better direct conservation efforts to areas beneficial to sage-grouse.

MESIC HABITAT RESTORATION

Enhancing and protecting mesic resources have many benefits to our rangelands including increased drought resilience, sustainable water resources for livestock, and greater wildlife diversity. Depending on specific site conditions, landowner input and participation, and professional assessments, there are several conservation actions that can be considered when protecting and enhancing our mesic resources:

- Juniper removal
- Riparian planting
- Treating invasive weeds
- Low-tech stream restoration techniques (e.g., beaver dam analogs)
- Off-site water development
- Spring/stream fencing exclosures
- Developing grazing management plans

Figure 3. Mesic area within Baker County that may benefit from fencing exclosures and/or IAG treatments.

Meet Your New County Commissioner

My name is Christina Witham and I am a new County Commissioner. Coming into my Baker County Commissioner seat from a 30+ year private sector business owner has been an enjoyable, fast paced transition. I knew that I wanted to focus on natural resources for the county based on previous issues related to accessing our public lands and my families past timber harvesting experience. I know the people of our county, the businesses, the roads and lands and I am so excited to make a positive impact for everyone. My husband Russ and I have been married 34 years and have one son, Elijah who is married to Paige and are expecting our first Grandson in June. We have 2 dogs, Twig & Foxie Lady and we all love to recreate, hunt, gather and enjoy our beautiful county.

WEST NILE VIRUS & SAGE-GROUSE

West Nile virus (WNv) is a mosquito-borne disease that when transmitted can cause high mortality rates in birds. Sage-grouse are highly susceptible to WNv, but the degree to which WNv may be impacting the local population in Baker County is largely unknown. In particular, because sage-grouse populations in Baker County are relatively small and isolated, even lower levels of mortality resulting from WNv may have a high impact.

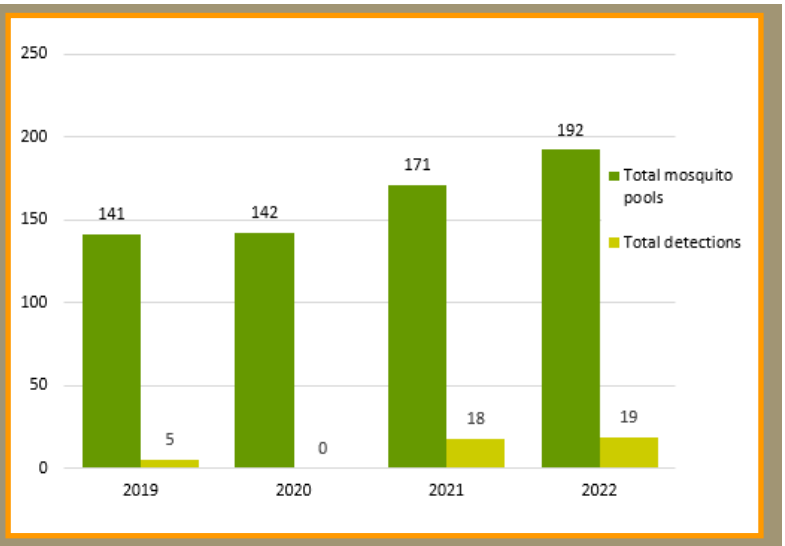

Figure 4. Total mosquito pools and total detections across all four sampling years (2019 –2022).

Previously, disease surveillance was solely focused in agriculture-dominated areas that are not utilized by sage-grouse. As such, to better understand the extent to which WNv may be limiting the local sage-grouse population, the Baker LIT established several mosquito trapping sites within areas of sage-grouse habitat (e.g., sagebrush steppe). This effort has continued annually since 2019 and in 2022 Powder Basin Watershed Council completed the final year of WNv monitoring. The Baker LITs monitoring data were combined with data collected by the Baker Valley Vector Control to develop a "hotspot" map to locate areas where the highest WNv detections occurred in relation to sage-grouse habitat in the Baker PAC. This map will assist Baker LIT and partners in potentially identifying where mosquito mitigation techniques (e.g., installing bubblers on new water developments in high occurrence areas) may be used to benefit sage-grouse.

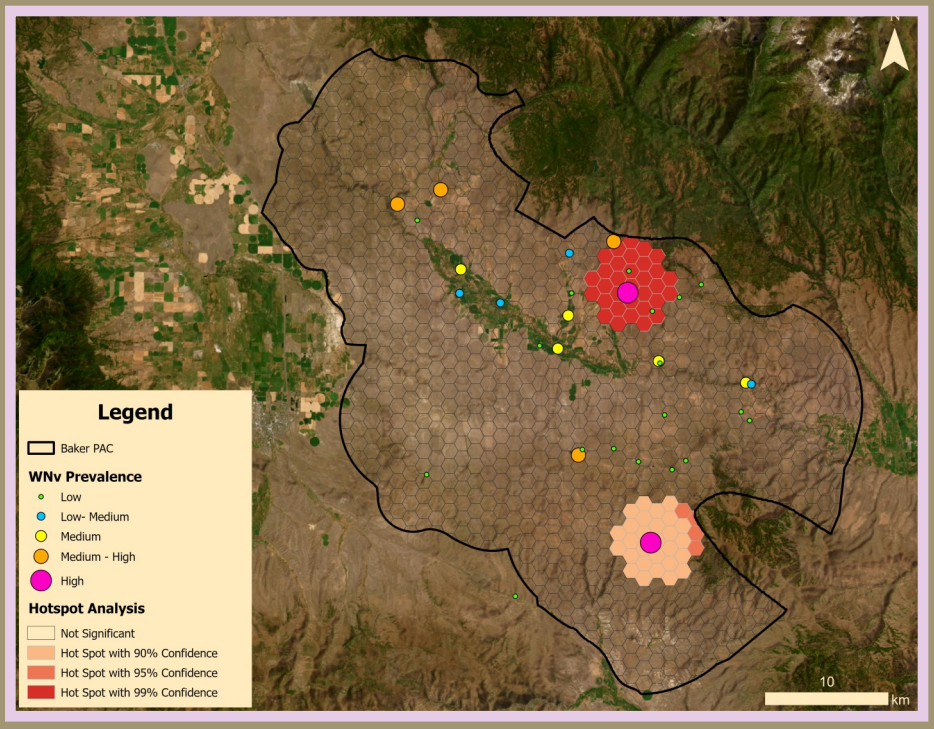

Figure 5. Map depicting WNv prevalence within the Baker PAC for the years 2019 - 2022. Red hexagons indicate hotspot areas.

UPCOMING WORKSHOP

In collaboration with Oregon State University Extension Service, the Baker LIT is hosting a Land Planning workshop! Participants will learn to use online GIS tools (e.g., Google Earth, OnX, Oregon Explorer) to map management boundaries, identify and locate ecological threats such as invasive annual grasses, and develop and share land management plans with project partners. Cost is free and you get free lunch to boot! For more information see the flyer below and/or contact Morgan Solomon, Baker Sage-grouse LIT Coordinator at 541-239-7016.