



SAGE NEWS

Baker Sage-grouse LIT Newsletter

Happy Spring! As the warm weather and rain welcomes us this spring, the sage-steppe is starting to come back alive. This is a very busy time for sage-grouse who are in the middle of their lekking season.



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Sage-grouse hens lay an average of 6-9 eggs in a ground nest generally hidden under sagebrush or bunchgrasses.



Important Dates:

- ◆ **April 10th:** Baker LIT spring project and quarterly meeting @ 8:00AM. This meeting is being held via video conferencing.
Webex Link: <https://bakercounty.webex.com/bakercounty/j.php?MTID=ma4570cd2fc72a560709e6052f3fb1800> Password: KPgH3m3yRq8
- ◆ **April 16th:** Monitoring training for FIP projects.
- ◆ **May 15th:** OWEB Technical Review Team meeting for spring 2020 selected FIP projects.

SAGE-GROUSE FACTS



Lek Counting:

Each year the Oregon Department of Fish and Wildlife, BLM and USFWS biologists visit greater sage-grouse breeding sites (called leks) to document activity and help with population estimates. Greater sage-grouse are most active on their leks two hours after sunrise and two hours before sunset—the most romantic times on the sagebrush steppe. Males demonstrate their elaborate courtship displays which are accompanied by a unique gurgling or popping sound created by the air sacs located on their chest.

Forbs for sage-grouse:

Forbs, herbaceous flowering plants, are an integral component of the sage-grouse diet and life cycle. Wildflowers flourish in healthy sagebrush ecosystems providing an important habitat component for sage-grouse. Sage-grouse chicks forage for insects that are closely associated with certain forbs. In depleted sagebrush systems, forb populations are greatly reduced and are difficult to restore. Researchers are currently working to find the best methods to restore sagebrush understories to include a strong forb component. Some of the most preferred forbs include: composites with milky sap such as hawksbeard and dandelions, vetches, chickweeds, penstemons, lilies, biscuitroots and, more.



Examples of Preferred Sage-grouse Forbs



Crepis occidentalis
Large flower hawksbeard



Penstemon humilis
Lowly penstemon



Calochortus macrocarpus
Mariposa lily



Phlox longifolia
Longleaf phlox

LIT UPDATES

BAKER LIT RESPONSE TO COVID-19. The Baker LIT is aware of the hardships the COVID-19 pandemic has had on Baker County. The LIT is continuing to function throughout this time. All projects that were planned to be implemented this spring and summer are still on schedule. Although most stakeholder meetings will be held through video conferencing and phone calls for the foreseeable future, the LIT plans to stay on track as much as possible.

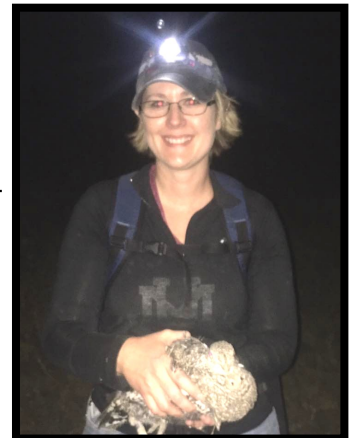
Monitoring Efforts

The Baker LIT has been working for the last few months to develop a monitoring protocol to be used for all projects funded through the OWEB Focused Investment Partnership Grant in Baker County. A robust monitoring program will not only allow the Baker LIT to better understand the success of our projects and manage for the future, but will also increase the knowledge base for others participating in sagebrush restoration and conservation throughout the region.



Meet the USFWS LIT Representatives

Marisa Meyer — Marisa is the US Fish and Wildlife Service Field Office Supervisor in La Grande. She has been with the Service since 2002 in various capacities, working with partners to conserve and manage species in eastern Oregon. Marisa is a Baker County native, wildlife artist, and avid hunting and fishing enthusiast. She's always had a love for wildlife and the outdoors. In high school you would find her volunteering for mourning dove surveys, elk trapping, hunter check stations, pygmy owl surveys, damage control calls, and more, instead of watching movies. Marisa graduated from the University of Montana with honors in the wildlife biology program. After graduation, she became a wildlife biologist with the Bureau of Land Management in Vale, Oregon, where she primarily worked with sage-grouse and their habitat for three years. Throughout her career, she has had the opportunity to work with a number of eastern Oregon species including golden eagles, pygmy rabbits, Columbia spotted frogs, bats, western toads, and sage-grouse. When, she isn't working, she likes to get outdoors with her husband, horses, and dogs, to enjoy the very reason she picked wildlife management as a career... nature itself! After all, life is too short not to enjoy another walk in the woods.



Jackie Cupples— Jackie joined the US Fish and Wildlife Service's La Grande Field Office in 2015 as a Sagebrush Ecosystem Biologist. Putting local efforts on the ground in Baker County is especially exciting to her after planning state-wide sage-grouse conservation efforts as Oregon Department of Fish and Wildlife's (ODFW) Sage-Grouse Coordinator (2014-2015). Collaborating with enthusiastic landowners and partner agencies makes all this work fun! With only indoor job prospects after completing a Bachelor of Science degree in Chemistry from Georgetown University, she pursued a Master of Science degree in Recreation, Park and Tourism Administration from Western Illinois University, and a Master of Applied Science degree in Wildlife Health and Population Management from the University of Sydney, Australia. Upon her return from "Down Under", Jackie began working with ODFW's research branch. She has conducted research and field work with a number of species including Australian dingoes and foxes, wolves, black bears, mule deer, elk, Columbia spotted frogs, and sage-grouse. A transplant from Maryland, she made Oregon her home in 1999 and enjoys the unique, welcoming culture, as well as the natural solitude of eastern Oregon with her rescue cocker spaniel mix, Sadie, and musician fella, Luke.

SCIENCE IN THE SAGE

Grazing and Insects:

Insects are integral components of the sagebrush steppe. Insects are a main food source for many animals and are important pollinators along with birds and animals. Pollinating insects such as butterflies and bees administer approximately 85% of pollinating services. Pollinators promote the success of wildflower populations and maintain biodiversity throughout the sagebrush steppe.

The digestive system of the sage-grouse chick is not yet developed enough to digest sagebrush and other flowering plants for the first few weeks of their lives. Arthropods such as caterpillars, grasshoppers, beetles, and ants are the major food source for sage-grouse chicks during this time. Without insects to provide pollination and food, sage-grouse would greatly suffer from diminished resources throughout all life-stages.

It is well understood that management activities can greatly influence ecosystem success and productivity. Recently, research has shown that proper cattle grazing practices can actually increase pollinating insects and insect food sources for sage-grouse chicks.

One study out of Montana State University has shown that grazed rangeland supports higher numbers of pollinating insects such as bees and flies. Another study found that a deferred grazing system supported the highest number of arthropods preferred by sage-grouse when compared to grazed rangeland without deferment and idle rangeland with no grazing.

These studies emphasize how proper grazing practices can be beneficial to the ecosystem. A healthy ecosystem supports higher quality and quantities of forage for livestock production. Soil health heavily depends on management practices which have a cascading effect on vegetative productivity, diversity, insect populations, and nutrient cycling. To learn more about these topics please follow these links:

- ◆ Grazed Rangelands Produce Sage Grouse Chicks' Preferred Food
http://www.sagegrouseinitiative.com/wp-content/uploads/2018/11/ScienceToSolutions_GrazedRangelandsProduceMoreBirdFood_Nov2018.pdf
- ◆ How Does Grazing Affect Native Pollinators
<https://www.sagegrouseinitiative.com/ask-an-expert-how-does-grazing-affect-native-pollinators/>



Sage-grouse inhabit the sage steppe ecosystem that covers 186 million acres in parts of Washington, Oregon, California, Nevada, Idaho, Montana, Wyoming, Colorado, Utah, South Dakota as well as Alberta and Saskatchewan, however most of that range is not fully utilized by the bird.

