

## 2018 USAFRI Research Project Objectives

### **“Alfalfa, Wildlife, and the Environment” Publication Update University of Minnesota - Sheaffer**

Project Award: \$38,450

#### Justification:

- The NAFA publication “Alfalfa, Wildlife, and the Environment” was published in 2001 in the context of growing criticism of the use of groundwater resources for producing irrigated alfalfa during California’s prolonged drought. This document provided a wealth of excellent information on the economic and environmental benefits of alfalfa, and particularly its value to wildlife in agricultural landscapes. However, in the time since its publication, this document has become somewhat dated, and is now out of print, though available online. We propose to refresh this effort and expand the options for disseminating this information by 1) creating an updated publication, and 2) developing a narrated educational module in the form of a slide presentation.

In the last two decades, the approach of environmental campaigns to agricultural issues has shifted from a negative view, in which farmland was seen as an environmental loss and the goal was to intensify agricultural production in order to minimize the need for farmland and maximize protected non-farmed land, to a more balanced view, in which working farmland is seen as a vital part of natural ecosystems, with exciting potential to contribute to biodiversity, water quality, and wildlife conservation. This newer movement understands perennial crops and nitrogen-fixing legumes as a crucial element of agricultural sustainability. Promoting sustainable agricultural practices is now an integral aim of the environmental movement, and connections are being built between wildlife conservation advocates and farming and crop production organizations. Sharing information is crucial to ensure that the goals of both groups are met.

Criticisms of the water used in meat and dairy production have grown in reach and urgency, as an increase in the duration and intensity of drought periods has come to be understood as a lasting consequence of climate change. Meanwhile, outside of brief mentions of alfalfa as a “thirsty” crop in media coverage of water conservation campaigns, alfalfa is a largely invisible crop to the general public. This speaks to a need for publicly accessible information not only to demonstrate the value of alfalfa as a crop, but to inform the public on the unique contributions that this perennial legume can make to cropping rotations and the ecosystem services such as soil health and pollinator forage. In the process, we will highlight the advances that have been made in water-conserving practices, and the continuing research and progress in that area. The re-written document and presentation materials will be a valuable resource for policymakers and advocates, aspiring farmers, and students.

#### Objectives:

- The objectives of this project are to 1) To provide an accurate, well-organized summary of the production and uses of alfalfa, and the ecosystem services provided by this crop, particularly including benefits to wildlife, biodiversity, and soil health; 2) To ensure that all information is up to date and reflects the current state of scientific understanding and agricultural practice; 3) To produce an engaging and visually appealing publication that meets the expectations of contemporary readers; 4) To clarify the scope of the updated document, reducing the specific focus on California and ensuring that it is relevant to a national audience; 5) To expand the options for disseminating this information by making it available in the form of both a text document and a presentation prepared for live audiences; and 6) To tailor the updated materials.