HEDGEROW FARMS

Winters, CA



HEDGEROWS
NATIVE SPECIES PLANTS

John Anderson

John Anderson's love of wildlife and concern about disappearing wildlife habitats is what drove him to become a farmer. He and his wife Marsha bought their Yolo County farm in 1974 and started doing habitat work on the edges of the fields they leased to their neighbor. Over the years, John became increasingly interested in native grasses, and by the late 1990s - after an early retirement from his career as a veterinarian - he started Hedgerow Farms. As John explains, "I became interested in grassland and grasses, recognizing that our native grasslands were one of our most imperiled ecosystems."

Today, Hedgerow Farms grows over 60 species of native grassland seed and transplants for various bioregional ecotypes. Now John leases land from his neighbor, with over four hundred acres in production. Hedgerow Farms is one of just a few native seed growers in the state. They are one of California's leading advocates for native grassland habitat restoration.

While hedgerows do not necessarily reduce water use, they improve water quality significantly and provide important benefits for wildlife. According to John, "Some people would argue that hedgerows are using more water, especially when you start putting in trees. Our feeling is that the amount of water being used on these small-scale riparian corridors is insignificant when you start talking about the big picture and how much riparian ground has been lost."



Field border hedgerow

WHAT ARE HEDGEROWS?

- Hedgerows are vegetation strips planted along farm edges, field borders, fences, and waterways.
- They incorporate a diversity of perennial grasses, sedges, rushes, forbs, shrubs, vines and trees that provide multiple on-farm and environmental benefits.
- Hedgerow Farms grows native species specifically selected for use in habitat restoration, reclamation, and water quality protection.

BENEFITS

 Vegetated systems play a significant role in improving water quality. Filter strips/buffers capture and prevent sediment, nutrients, and pesticides from entering waterways and groundwater. Trees provide shade that cools water to appropriate levels for aquatic species and reduces evapotranspiration.

- Plant roots help build soil structure, enhancing water infiltration and groundwater recharge. "Vegetation enhances groundwater recharge," explains John. "Native species provide a biodiverse system that is actually cleaning the water. Vegetation enhances infiltration, compared to a compacted roadside, where irrigation water runs off rather than into the ground."
- Hedgerows provide wildlife habitat for animals and beneficial insects such as predators and pollinators.
 "Hedgerows are incredibly important because you need a continuous supply of pollen and nectar to maintain healthy populations of beneficial insects such as lacewings, ladybugs, wasps, native bees and butterflies," says John. By providing the habitat, native bee populations can be bolstered, in turn increasing crop yields.
- Well-established perennial sedges, grasses and rushes provide stabilization, making ditch banks less prone to erosion and lowering the labor costs associated with ditch bank maintenance.
- Vegetated systems such as hedgerows provide biodiversity to the farm ecosystem and help maintain soil quality.
- Hedgerows function as windbreaks, redirecting the wind and reducing crop damage from wind, dust, and pesticide drift.
- Once established, native species plants suppress weed growth, minimizing dependency on herbicide.

COSTS

- According to John, "Nobody has done a good cost benefit analysis, but it absolutely needs to be done. My feeling is that it is going to cost the same, but the vegetated system is going to have so many more benefits: biodiversity, aesthetics, and wildlife watching."
- Vegetated systems have a three-year establishment period with set-up costs including plants, labor, and possibly irrigation for two to three years.
- With established plants, maintenance costs may include labor and fuel for mowing, and in some cases spot herbicide application.

LESSONS LEARNED

• **Know your soil and drainage conditions.** Choose the proper plants for the site.

- Soil preparation is extremely important. John explains, "Do it right the first time so you are not fighting the weeds. Do your ground prep and initial herbicide spray to reduce weedy competition."
- Do it all at once. "Don't plant your shrubs and expect to come back and plant your understory later - do it all at once and do it right."
- **Use local technical expertise.** There are many programs available to help plan and establish a hedgerow or vegetated system. (See Resources section.)
- Look at other projects. John recommends investigating projects that have been in the ground for a while to get an idea of what a mature system looks like. For example, Hedgerow Farms planted hedgerows, grassland roadsides, vegetated canals, vegetated tail water ponds, and riparian habitats over fifteen years ago.



Wildlife at Hedgerow Farms — Photo credit: Hedgerow Farms