Case Study: Leveraging Existing Natural Areas for Blueberry Pollination in Oregon

Brian and Rhoda Giblers's blueberry farm in Eagle Creek, Oregon, resembles many mid-sized family berry farms in the region. Well-maintained rows of mature bushes stretch across several acres, surrounded by neighboring horse pastures and hayfields.

A closer look, however, reveals something not found on many farms in the area—a diverse remnant native plant community of camas, lupine, and popcorn flower all thriving within a seasonal wetland system that includes a grassy ephemeral creek bed just outside the blueberry field. Such meadows are now among the rarest plant communities in the Pacific Northwest, with most of them in western Oregon having been lost to agriculture long ago. Despite the loss of these meadow systems, they remain among the most important habitat type for pollinators in the region, and their protection can provide direct benefits to farmers of bee-pollinated crops.

Wildflower seeding in areas such as this field border can be an attractive way to provide additional pollinator resources. (Photograph by Eric Lee-Mäder, The Xerces Society.)

The existence of this native plant meadow is a testament to the Giblers's excellent land management practices, which focus aggressively on the control of invasive weeds such as Himalayan blackberry, Canada thistle, and teasel. Each of these weeds is quick to invade within blueberry rows, and once established they can be difficult to control. By constantly working to keep invasive plants under control across the farm, the Giblers have created conditions that allow the native plants to thrive. In addition to preventing weeds from growing within the blueberries, the recent arrival of spotted wing drosophila (*Drosophila suzukii*)—a major pest of berries—makes the control of blackberries even more important (to eliminate alternate food sources for the pest).

While this program of invasive plant control alone has made the Giblers's farm a rich landscape for bees, they haven't stopped there. Working in field border areas where equipment traffic is more frequent, and some disturbance is unavoidable, Brian and Rhoda have done simple broadcast seeding of low-cost native wildflowers such as California poppy, clarkia, meadowfoam, selfheal, and more. These wildflowers extend the pollen and nectar resources throughout most of the growing season.

The impact of these efforts is obvious and remarkable. On any given day in spring and summer, the Giblers's wetland meadows and field borders hum with countless native insects like yellow-faced bumble bees, green metallic sweat bees, and even grey hairstreak butterflies. The dazzling flower color that attracts these insects also makes the farm gorgeous—resulting in neighbors asking the Giblers what they are doing to encourage all of the wildflowers. Beginning with a foundation of high-value native plants, supported with invasive weed management, and supplemented with low-cost wildflowers in field edges, the Giblers demonstrate a straightforward pollinator conservation model that is within the reach of many farmers.

This pollinator habitat was enhanced by broadcast-seeding additional native wildflowers into a remnant native grass and wildflower meadow that already included camas, lupine, and other forbs. (Photographs by Eric Lee-Mäder, The Xerces Society.)