

# Banking on Beetles in Oregon: Gathering Together Farm

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## Gathering Together Farm

Gathering Together Farm (GTF) is located in Philomath, Oregon on the banks of the Mary's River. Owners John Eveland and Sally Brewer have managed 40 acres of certified organic vegetables for over twenty years. They are committed to growing their 50 different crops which include over three hundred varieties in an ecological and sustainable manner.

In addition to being a community supported farm (CSA), GTF sells fresh market produce through wholesale, local farmers markets, and local restaurants, and houses a thriving on-farm market and café. GTF also partners with Frank and Karen Morton in a flourishing organic seed business marketed under the trade name of Wild Garden Seed.

Over the years, John and Sally have employed a variety of conservation biological pest management techniques including insectary crops and a beetle bank. Much of Gathering Together Farm's field edges consist of lush, mature, riparian areas. This, combined with the seed production fields located on the farm, provides abundant habitat and hearty blossom throughout the growing season. This blossom helps support a diversity of beneficial organisms.



Striking a balance between beneficial organisms and pests is the key to biological pest management. As Farmer John summarizes, "We don't want to kill off all the bad guys. We want to have just enough out there to feed our beneficial population".

## The Experimental Beetle Bank at Gathering Together Farm

GTF's experimental beetle bank is the first mechanically (and manually) transplanted beetle bank in the state. The 4 X 560 foot bank is planted with blue wild rye (*Elymus glaucus*), slender wild rye (*Elymus trachycaulus*), and water foxtail (*Alopecurus geniculatus*). Approximately 7000 plugs of the native grasses were transplanted by three workers lying on their stomachs on a transplanter implement pulled by a tractor. It took about 2 hours to plant the entire bank. Each row contains four plants approximately 6-10 inches apart. The transplants were irrigated regularly. Within a month the transplants had more than doubled in size creating a healthy bank of grasses and broadleaf weeds.



Leaf compost was added and the bank was raised using a bar that has two discs mounted on the ends to push up the soil 10-12 inches



Loading the transplanter

Transplanting the bank

## Bank Weed Management

Farmer John Eveland did a major flaming on portions of the beetle bank to manage an onslaught of broadleaf weeds five weeks after transplanting. He used a five burner flamer that is pulled behind a tractor. A crew of four hand-weeded the 25-35 % of weeds that were not impacted by the flaming.

The long-term implications of flaming on grass growth, density and weed competition is unknown at this time. The wild rye grasses are an upland prairie species that evolved with prairie fires. Though the water foxtail withstood drought and flooding well in other trials it did not recuperate from the flaming as quickly as the wild rye grasses. Another flare of annual weeds that was hand-weeded pushed the estimated cost of weeding labor over \$1000 for the bank. In retrospect, John felt another flame application or two would have probably managed the weeds better and would have been more cost effective than the hand-weedings.

The transplants were healthy, with multiple tillers about 6-9 inches tall by the end of the first summer. The beetle bank is going into its second summer with a thick, lush stand of grasses and very little weed competition.

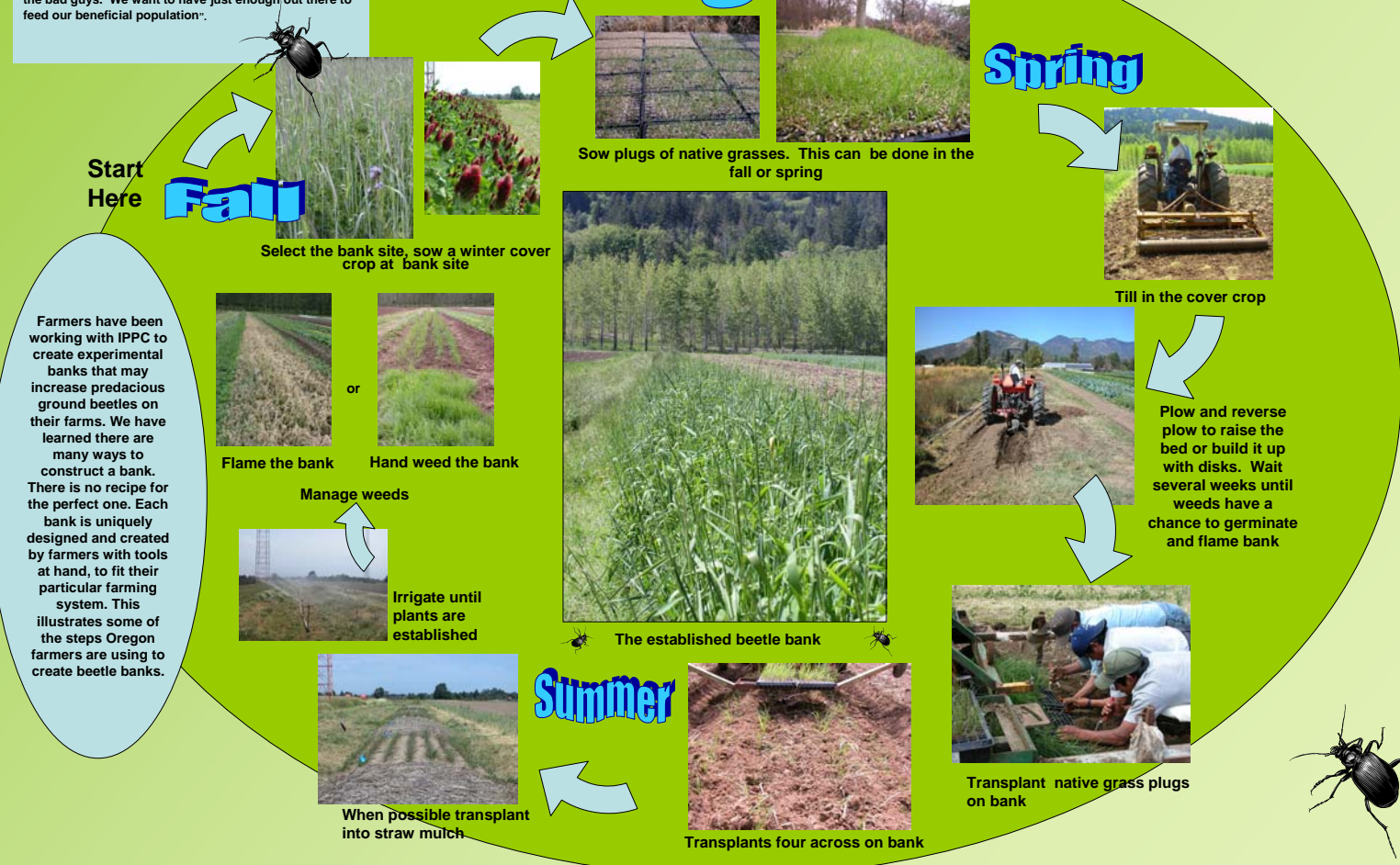


Pigweed and blue wild rye days after flaming



Beetle bank in Spring 2007

# Creating the Bank



Farmers have been working with IPPC to create experimental banks that may increase predacious ground beetles on their farms. We have learned there are many ways to construct a bank. Each bank is uniquely designed and created by farmers with tools at hand, to fit their particular farming system. This illustrates some of the steps Oregon farmers are using to create beetle banks.

