






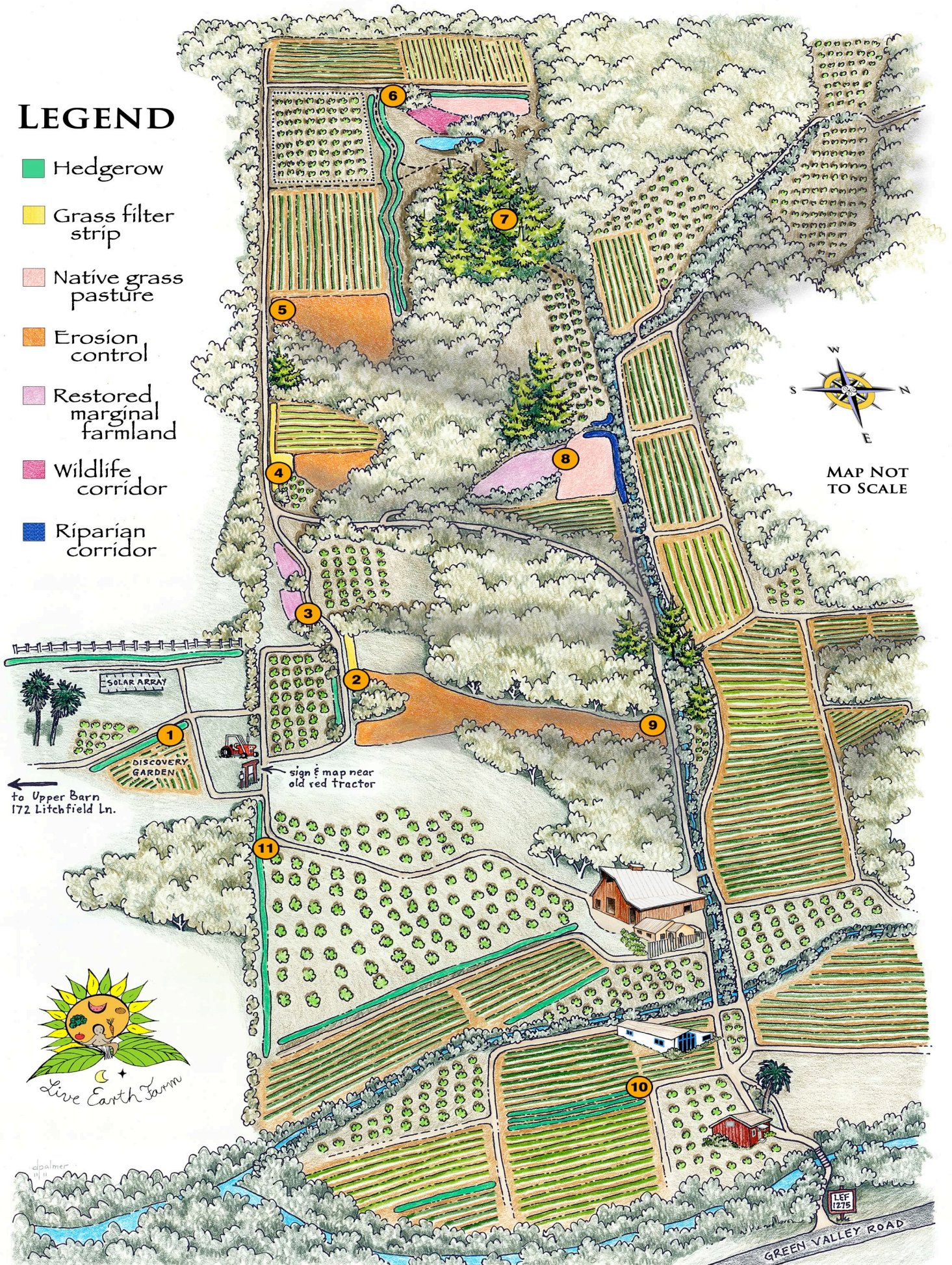


LEGEND

-  Hedgerow
-  Grass filter strip
-  Native grass pasture
-  Erosion control
-  Restored marginal farmland
-  Wildlife corridor
-  Riparian corridor



1 Live Earth Farm has many **hedgerows** – literally rows (not necessarily straight) of diverse native plants with overlapping flowering periods. Hedgerows create beneficial insect habitat and windbreaks, retain soil and water, **increase biodiversity**, and establish wildlife corridors; we vary each one to suit the individual situation. This hedgerow attracts beneficial insects, features water-loving plants in a boggy section where water drains slowly, and acts as a windbreak to keep down road dust. As an 'entryway to the farm' we chose natives particularly beautiful to the eye, and since it abuts the Discovery Program's educational garden, it also proves useful for teaching students of all ages about the benefits of hedgerows.



2 Here water running off the road created gullies, so we planted a strip of **deep-rooted perennial native grasses** to hold the soil in place and capture the sediment runoff. Beyond the grass filter strip the land is even steeper and there is a gap in the oak woodland, so we planted **larger shrubs** in the gap to help **stabilize the slope**. Across the road and back a ways, a new **hedgerow** alongside the apricot orchard provides **habitat** for pollinators and creates a **wildlife corridor** by connecting the isolated oaks.

3 Because of its slope, small size and isolation, this bit of farmland was marginal, so we are **converting** it back to **natural habitat**. We used burlap bags as mulch around the base of the plantings: in time the burlap will deteriorate and disappear. You can compare this to the marginal farmland restoration site around the bend, which used wood chips as mulch. We want to see which weed-control technique works better over time.

4 The steeper part of this field had serious gully problems, so farmer Tom Broz chose to take the lower section out of production and restore it to natural habitat, including a **filter strip of deep-rooted native grasses** by the road. The extra-wide strip at the east end has done a great job of **erosion control**, where the gully was deepest.

5 Plantings in this location serve a dual purpose: they **control erosion** on the land sloping away from the cultivated field, and also **restore** what would only ever be marginal farmland to more productive **natural habitat**. In the past there had been a big landslide just below here (took out the road!), so we installed many native trees and shrubs to anchor the slope including live oaks in the distance (up against the existing oak woodland and redwoods), and lots of willows, on the steepest part of the slope.

6 Here several conservation practices are at work. Between the isolated patches ("islands") of live oak, we planted a **native grass pasture** and mix of shrubs. Once they fill in, **wildlife** will have a **corridor** leading to the larger live oak woodland and riparian areas to the north. The **hedgerows** create a **transition zone** between cultivated farmland and well established native habitat.

7 The heart of this beautiful redwood grove used to be blanketed by an **invasive**: non-native English ivy. It's gone now, having been **meticulously pulled** by hand over multiple visits.

8 The land here had become degraded over the years, but now more diverse species of birds and other wildlife are returning thanks to changes made. In the steep area up against the oak woodland and redwoods, **marginal farmland** is being **restored to natural habitat**. Closer to the road, **native grass pasture** was planted from the west (orchard) to the east (fields). It takes a long time for perennial grasses to get established, but ultimately they will displace the annual weeds. Along the ephemeral stream at the base of the slope, farmer Tom Broz chose to restore the **riparian corridor**: we added alder, cottonwood, black walnut, and sycamore to the willows already regrowing on their own.

9 Look up this steep slope which ascends between two small ridges: this area has historically **had severe erosion** problems. We planted the entire slope with a variety of native shrubs and trees, including lots of oaks, all the way to the top by Site 2. Oaks were chosen specifically so that as they become established, they will not only **stabilize** the slope but also fill the gap in the oak woodlands, creating **continuous habitat**.

10 You'll note this **hedgerow** is down on the 'flats', in the middle of farm fields. As with other hedgerows it provides **habitat for beneficial insects** (natural pest control) and **forage for native bees** (natural pollinators). This particular hedgerow is three rows wide: not many farmers will take three farm rows out of production, but farmer Tom Broz sees the long-term benefit of having robust communities of natural insect predators and pollinators.



11 This **hedgerow** runs along the property border all the way down the hill to the big field in the 'flats' below. As in Site 10, the plantings **attract natural pest-controlling predators and pollinators**; here, they serve the apricot and apple trees instead of row crops. This hedgerow also acts as a visual **border**, but unlike a fence, it is **permeable** so wildlife can pass through.