

If you are interested in evaluating buds in your own blocks, here are some of Mike's thoughts from the experience:

- I followed the protocol of two branches (one each from the upper and lower canopy) from 5 representative trees per block.
- I looked at 10 spurs per branch, unless the branch had fewer than 10 spurs. If a spur had multiple buds, I chose a single bud from that spur at random. Since Honeycrisp spurs also have a tendency to produce bourse shoots, terminal buds on these were also fair game.
- I used a single edged razor blade to cut through the middle of each bud length-wise (figure 1), and looked at the buds under a tabletop dissecting scope (figure 2). These can be purchased online for around \$100. You're also welcome to come in and use the one at the Orleans County CCE office.
- In figure 3, you can see what a floral bud (top) vs. a vegetative bud (bottom) looks like under the scope. The vegetative buds are fairly narrow and will only have leaf primordia at the tip of the bud. Floral buds will appear more rounded, and will have small, light green floral tissues at the tip of the bud. These can be difficult to tell apart at first, so I recommend cutting open a few practice buds until you get your bearings on what is what. I find Honeycrisp particularly challenging to tell apart (it is Honeycrisp, after all). I also looked at buds with a hand lens but found I couldn't distinguish the vegetative vs. the floral buds very readily with it.
- After getting into the swing of things, each block was taking me about 70 minutes to fully assess. This does not include the time it took to cut the limbs from the orchard.



Figure 1. Cutting buds to evaluate under the scope. Try to cut as close to down the center as possible to make the floral tissues easier to see.



Figure 2. My scope setup. A dissecting scope like this can be purchased online for about \$100.

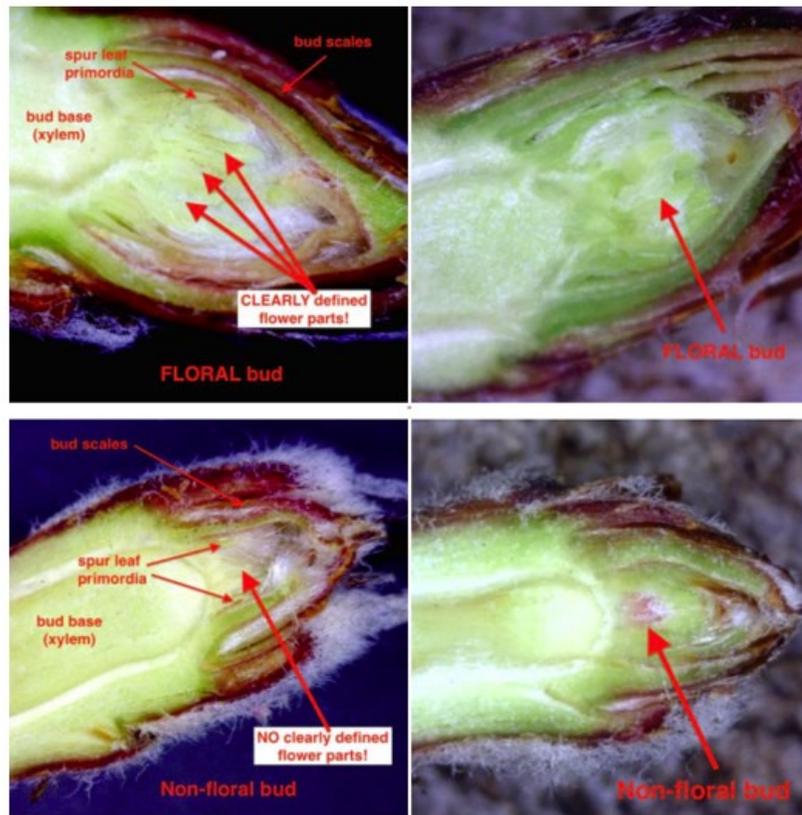


Figure 3. A floral bud (top) vs a vegetative bud (lower). The vegetative bud is narrow, and only shows leaf primordia at the tip of the bud. The floral bud is more rounded and shows light green floral tissues at the tip of the bud. Photo credits courtesy of Jon Clements and Win Cowgill.

So, I recommend trying it if you have the time and interest. As stated above though, it can be very difficult to tell them apart, so you might want to prune lightly now, and then make more precise pruning adjustments after green tip when you can tell the buds apart on the tree.