Case studies:

Case #1: A new organic strawberry grower is struggling with managing tarnished plant bug. There are no other crops grown on the farm, but plenty of land to allow for a 3-year rotation. At this time there are both newly-planted and fruiting plants on the farm. Berries are picked for one year and plowed down. She currently plants a rye/vetch cover crop for nutrients, which is plowed down in mid-May prior to planting strawberries in June. But, when mowing the cover crop, she sees many tarnished plant bugs, panics and calls you. What would you recommend she do for this year and next year?

Questions and recommendations:
- Bugs are worse in weedy fields and leguminous cover crops – are fields weedy? Are neighbors growing alfalfa?
- There are resistant varieties of strawbs.
- Don’t mow your cover crop until all strawb. fruits are done
- The year before you plant your strawbs, don’t use an overwintering legume (use PVO mix?)
- Devote some time to good weed control – flushing fields mid-season
- Scout frequently for tarnished plant bug
- Educator can set up an on-farm trial of approved pesticides to attempt to control bugs
- Introduce a predator to the field (tarnished plant bug parasitoids) and establish a permanent habitat
- Use black plastic and push the earliness of the berries to get a premium for that fruit; leave the damaged late berries
- Think of another market for your damaged berries – jam, etc.

Case #2: A new landowner comes into your office for advice. He has just purchased 10 acres of prime agricultural land that he would like to prepare for farming organically, starting in about 4 years. He doesn’t live in the area, has no equipment, but a neighboring dairy farmer has equipment and would be willing to help out with tasks, on occasion-time permitting. He is applying for certification. The fields have been abandoned for about 5 years, and are very weedy. Soils were tested and pH was 6.0 and P was low. All other nutrients were at levels that were acceptable. What would your recommend?

Questions and recommendations:
- Where is this farm? What do you plan to grow? Why are you choosing to wait 4 years? How soon do you want income? What condition is the vegetation on the farm (woody, shrubby?) Land history? Any special conservation easements or anything preventing the full 10 acres from being utilized? Soil test looked at organic matter? More specific info. on the type of soil. Where is the water source? Will you be putting in a well? Where are your markets? How much time do you have to commit to this now, next year, etc.?
- Assume: going to grow veggies, coming in for advice in the fall, located in ME
- Address weeds, pH, and P levels
• Don’t expect a cash crop in the 1st year
• Ask neighbor to do some mowing and apply lime this fall, incorporate it into soil, but don’t cover crop this fall
• Re-test for pH and P the next spring
• Do full field plowing and sow Sorghum-sudangrass next spring, mow at end of season, plow and seed red clover and rye
• Alternate suggestion to sow rye with an underseeding of clover, and offer rye seedheads to the neighbor – if you don’t know what the soil organic matter is, might end up with a wimpy Sudex stand and a lot of weeds
• Offer for the neighbor to take off some of the sudax as hay in exchange for his help
• Stay in touch with certifier through this whole process
• Make sure he’s using either untreated or certified cover crop seed from the start
• Recommend that he look at his capital and business structure so that he can buy equipment soon and be able to manage the land as he needs to, instead of relying on his neighbor’s goodwill – first year, manage the whole piece of land as one field to facilitate neighbor’s help

Case #3: A grower, who has been farming organically for 10 years, calls you for advice. She wants to know if she should get certified. She has secure markets and excellent relationships with her customers at a local farmers market and through restaurants around town. She has about 30 different vegetables and small fruit. Her farm is slightly rolling and hilly, and she has about 15 management units on about 6 acres. What would you suggest?

• Assume: she sells more than $5,000 worth.
• Why does she want to be certified – financial, ethical?
• How will it affect her markets – will she lose existing customers with higher prices?
• How good is she with paperwork? If she already has good records, it could reduce certification time.
• Inform her of various certification agencies, ask about networks and cost-sharing programs for certification. (NRCS)
• NRCS has a “Transition to Organic” program for the 3 years of transition – works differently in each state.
• Conservation Securities Program – $ for organic farmers or others using certain defined conservation practices on their farms
• USDA funds handled through state Dept. of Ag. to pay 75% of certification
• Have her fill out the certification paperwork as a practice exercise.
• Identify anything she’s currently doing that may not be acceptable to certifiers and determine how to remedy it.
• Consider transitioning in phases to see if it’s what she really wants to do.
• ATTRA has a workbook you can use to see how prepared you are for being certified.
• How do you help a grower decide which certifier to go with? Provide contact info and schedules of events, meetings, etc. for all certifiers in that state.

Case #4: The model nutrient budget for Spiral Path Farm currently shows excess nutrient application of 194# N, 54 #P, and 107 # K per year. This is because they typically apply about 20 tons of compost /ac before their crops. If they reduce their rate to 10 tons/ac per year, these numbers fall to 102# N, 30#P and 37#K per ac per year, still very high. You have visited this farm and heard the owners speak. How would you approach this issue with them?

• Look at their soil test, past to present. What is their land base? What are the economics of applying 20 tons/ac of compost? History of ground before they were there. What did they do for crop rotation and cover crops? What is their objective for heavy compost applications? Do they apply diff. amounts of compost for diff crops, or is this just a blanket application? Any other nutrient sources they’re using?
• Get in touch with local NRCS office to sign up for nutrient management incentive
• Talk with them about diff crops they do grow and pick out nutrient hog crops to suck up some of the excess nutrients
• Put on cover crops, overwintering them, plowing them down young – this would hold some of the nutrients during the winter leaching time
• Group disagreed about reducing to 10 tons/ac of compost vs. entirely eliminating compost applic. temporarily. Could pick one crop to try reducing to 10 tons/ac compost to see if it makes a difference in the performance of the crop.
• SARE grant to test the fertility
• Do nitrate testing throughout the season
• Try some no-till organic demos – they’ve already got the soil built up
• Could apply some Chilean to get a portion of their N, but depending on certifier, this can only be a certain portion of their total N application
• Assess equipment – maybe could get some new equipment to apply lower rates of compost or to band compost to sidedress
• Get a water test to determine water quality
• Emphasize possibilities of on-farm demos – the farmers at this particular farm are really into this

Case #5: A new landowner comes into your office for advice. He has just purchased 10 acres of prime agricultural land that he would like to prepare for farming organically next year. He is applying for certification. The intent is to plant at least 5 acres to a mix of vegetables and small fruit. The fields have been abandoned for about 5 years, and are very weedy. The neighboring dairy farmer has equipment and would be willing to help out with tasks. What would your recommend?

Questions and recommendations:
Can you delay planting for 2+ years to work on weed issues? During that time, use cover crops to build soil organic matter and reduce weeds. Get a soil test; monitor soil before, during, and after this 2-year period. What sort of markets will you be selling to? What crops would grow best in these soils? Have you looked into NRCS programs for cost-sharing? Why do you want to grow organically? Do you have water? What is your financial situation? Do you have a tractor; are you going to buy one? Would it be possible for you to delay one year and go work for another grower to make sure that this is really what you want to be doing?

- If a 2-year delay is not acceptable, start with one acre to see how things grow, while managing weeds on rest of land.
- Intense cover-cropping for a few years to get rid of weeds. May need to do some education about the value of cover crops – give him the video.
- Determine markets before determining what to plant.
- Make sure you have a farm plan and a 5-year goal.
- Determine rotation plan in order to plan out how crops and covers integrate.
- What is your labor source/need?
- Talk to Farmland Protection Board to determine tax issues for agricultural exemptions.
- What is your mission statement, goals and objectives for your farm?
- Help him figure out what are the easier crops to grow organically for a beginning farmer?
- Consider incorporating an intensive fallow mid-season.
- Will need to get a letter from the previous owner establishing that no toxins were applied.
- Consider putting up a deer fence (some states have a cost-share program through NRCS or Fish and Game).