Late September or October provides the right time for shuck split on pecan. Depending on the weather for the year and the health of the tree harvest can be full or meager. Several conditions can cause issues.

Pecans require water throughout the growing season but during late summer water is essential for good kernel fill. If water is scarce, trees may abort or produce low quality nuts. Kernel development is influenced by temperature, especially at night. In Southeast Missouri temperatures are usually high throughout the summer. A cool summer, including night time temperatures, can cause a delay in nut maturity. Because southeast has the longest growing season in Missouri this is seldom an issue. This season, temperatures were lower overall so shuck split may be delayed.

Many cultivars produce a crop every other year. If one year is highly productive then the next may be low. If water is scarce throughout the year or particularly dry during kernel development, the tree may be stressed and not produce a good harvest next season.

Nut maturity can be affected by cold. If the first freeze of fall happens before shuck split then the nut can adhere to the shuck and the shuck will not open.

Pecan trees do not usually require much fertilizer once established. An annual application of 100 pounds of Nitrogen per acre can help to maintain a healthy planting that is better able to withstand attack from disease and insects such as the shuck worm and pecan weevil.

Sarah Denkler, Horticulture Specialist, University of Missouri, Poplar Bluff, MO
Frost Seeding Legumes

Research has shown that investing in legumes in cool-season grass pastures will result in improved forage quality and yield while reducing overall fertilizer costs. Legumes, such as clover, fix atmospheric nitrogen (free N) and when legumes make up 20% to 30% of overall stand the result is little to no nitrogen required for the companion cool-season grass crop. Legumes not only reduce the need for nitrogen, they also improve overall livestock daily gain and conception rates. Legumes help reduce the negative effects of ergovaline, the toxin produce by endophyte infected KY 31 fescue.

White (Ladino) clover is the most suited companion legume for pastures and the cheapest to spread. Other legumes include red clover and annual lespedeza. Red clover is more suited for hay production since it less tolerant to grazing than white. Annual lespedeza should be considered in the mix since its production is during summer, therefore, providing some feed when cool-season grass and clover production tends decrease.

Legumes do require some management during the establishment period. Prior to establishment adjusting pH above 6.0 and applying phosphorus and potassium fertilizer according to soil test recommendations will improve root development and nodulation for overall persistence. Now is the time to soil test and make these improvements prior to overseeding. During the fall and winter months it is important to manage existing pasture through proper grazing followed by overgrazing to reduce competition from grass and weeds during establishment months. Also, it is important to consider inoculating clover seed to insure good nodulation especially in fields where legumes have not been in the mix for some time.

Frost seeding is the most common method employed by producers. The window for frost seeding legumes is typically February. Later planting will reduce overall success of establishment since it is the freezing and thawing action of the soil that moves seed into the soil/seed zone. In some seasons such as 2012, January was more suitable due to unseasonable warm weather in February. So the timing window may vary slightly season to season. Seeding rates for ladino clover, red clover and annual lespedeza are 2 lbs/A, 10 lbs/A, and 25 lbs/A of pure live seed, respectively.

For more information on frost seeding legumes into existing pasture contact your local MU Extension Center and ask for guides G4651 and G4652, “Renovating Grass Sods with Legumes” and “Seeding Rates, Dates, and Depths for Common Missouri Forages” or find them on the web: http://extension.missouri.edu/p/G4651 and http://extension.missouri.edu/p/G4652.

Anthony Ohmes, Agronomy Specialist, University of Missouri, Cape Girardeau, MO.
Maximize Wheat Yield Potential

In order to maintain maximum yield potential it is critical to plant quality seed, plant at optimal time, calibrate equipment to insure a proper stand, maintain soil fertility, start with a weed free seed bed, and scout early for insects.

If purchasing seed, utilize University of Missouri wheat performance information to help make an informed decision on varieties suited for your needs. This information is available on the web or at the Extension Center. If you plan to use saved seed, have seed cleaned, germination tested and treated with a fungicide seed treatment. Wheat germination below 80% should be avoided.

Optimal planting window for wheat is October 10 through October 30. Wheat can be planted before and after this window which may be necessary depending on your situation. However, planting prior to this optimum window can increase the risk of yield loss due to insect pressure such as Hessian fly or aphid buildup, aphid vectored barley yellow dwarf virus (BYDV) or spring freeze injury. Planting after this window can increase the risk of poor fall tiller development and winter injury, such as heaving.

Optimum planting equipment for wheat is a drill. Optimal seeding rate should be between 1.3 to 1.5 million pure live seeds per acre. Increasing this number may be necessary under no-till systems. Optimal seed depth is ½ to 1.5 inches. An optimal final fall stand should be approximately 30 to 35 plants per square foot. Optimum number of tillers per plant by winter vernalization period is two.

A soil test may be necessary in order to assess wheat fertility needs. Adequate fall soil phosphorus is critical to maximize yields. Weed competition is just as limiting a factor as in other crops. Monitor fields in the fall for ryegrass and/or cheat. Monitor also for aphid populations in the fall. Aphid threshold is approximately 5 per foot of row in the fall for BYDV management.

For more information contact the University of Missouri Extension Center and ask for “Management of Soft Red Winter Wheat” and “Missouri Crop Performance: Wheat” or find them on the web: http://extension.missouri.edu/p/IPM1022 and http://varietytesting.missouri.edu/.

Anthony Ohmes, Agronomy Specialist, University of Missouri, Cape Girardeau, MO.

The Southeast Missouri Food Bank is eager for donations of specialty food crops. The food bank will bring a 24 foot box truck to pick up any edible produce, including seconds, which should be in a crate or box.

Contact James Landewee, Operations Director at 573-651-0400 several days ahead of time if possible and specify if a refrigerated truck is needed. He will provide you with a tax receipt for anything you donate.
Ag Expo 2014

Friday and Saturday, January 24 and 25, 2014
  Private Applicator Training
  Portable USDA Certified Kitchen
  Kids Garden Adventure
  Kids Tractor Pull
  Petting Zoo
  Child Safety Scavenger Hunt
  Cow Milking Demonstrations
  Educational Sessions

Exhibit Space is Available

For more information call: 573-686-8064

Watermelon Meeting

American Legion in Kennett, MO

Wednesday, December 4, 2013

Lunch is provided through our sponsors. For more information or to let us know you will attend call: 573-686-8064
The Director of Agriculture, upon the recommendation of the State Entomologist, announced today that the state quarantine regulating the movement of ash wood products has been expanded to include all 114 counties and the City of St. Louis. The change follows findings of Emerald Ash Borers in new, disparate locations during the annual summer survey.

Emerald ash borer (EAB), *Agrilus planipennis Fairmaire*, is an exotic Asian beetle accidentally introduced into North America before 2002. Its larvae feed on and kill ash trees, creating regulatory headaches and costing millions in control measures. In July 2008, a small EAB infestation was discovered at a Wappapello Lake campground. Since then, the beetle has been detected in several other counties in Missouri including Bollinger, Madison, Pulaski, Reynolds and Platte counties. You can help slow its spread by detecting it early in your area. Report signs of EAB at [http://extension.missouri.edu/emeraldashborer/](http://extension.missouri.edu/emeraldashborer/).

To help stop the spread of the beetle:

Don’t move firewood - EAB travels in firewood. When you camp, leave your wood at home. Buy only local firewood, and burn it all before you leave.

Avoid planting ash trees - EAB kills only ash trees. Choose other large shade trees for landscaping. Find good alternatives at [mdc.mo.gov/node/8045](http://mdc.mo.gov/node/8045).

While this is a serious threat, stop, take a deep breath, and consider these points before reaching for the insecticides or calling an arborist:

- Do you have ash trees on your property? Can you identify an ash tree? Several tree species look like an ash to the untrained botanist.
- Are your ash trees in good health? Ash trees with structural or pest problems unrelated to EAB or with a weak canopy (less than 50% exhibiting healthy, dark-green, leafy foliage) probably will not respond to any insecticides.
- If they are in good health, are they high-value trees? By this, do they provide shade on the west and south sides of your home? Were they planted by a child or grandchild, or in memory of someone? If so, then you will probably want to think about protecting them.
- Are you willing to be in this for the long haul? Once EAB arrives, insecticides are the only thing that will keep your ash tree alive. So, insecticide use could become a 20- to 30-year commitment until a replacement tree you plant nearby today can take its place.
- Use of insecticides is not recommended until an EAB infestation has been found within 15 miles of your location. Otherwise their use is a waste of money and an unnecessary chemical load on the environment.

Once you decide to use insecticides, seriously consider calling a professional arborist. The arsenal of insecticides that have proven to be effective against EAB is limited and some chemicals can only be legally applied by licensed professionals.

Information and photo courtesy of the Missouri Department of Conservation.
Future Meetings & Events -

**Watermelon Meeting:** Mark your calendar for the watermelon meeting to be held on Wednesday, December 4, 2013.

**Ag Expo:** Friday and Saturday, January 24 and 25, 2013 at the Black River Coliseum in Poplar Bluff, MO.

Commodities and markets - [http://extension.missouri.edu/seregion/fmmkt.htm](http://extension.missouri.edu/seregion/fmmkt.htm)