PESTICIDE APPLICATOR RECERTIFICATION

If your Maryland Pesticide License will expire on December 31, 2012 it is time to attend recertification training. To facilitate RECERTIFICATION your Carroll County Extension office will have two separate RECERTIFICATION opportunities for you to attend - Rooms K, A, and B. They will be November 20, 2012, 6:00 pm – 8:00 pm, and February 12, 2013, 10am – Noon. Preregistration one week in advance is required. Call (410-386-2760) in early to reserve your space as seating is limited and goes quickly. Be sure to bring your Pesticide License Number with you.

A third opportunity for Pesticide Recertification is being offered on December 6, 2012, 8:30am-3:30pm at the Northern Maryland Field Crops Day at Friendly Farms, Upperco, Maryland. More information on this meeting will follow in future issues of Farm Notes.

BECOME A MARYLAND CERTIFIED PRIVATE PESTICIDE APPLICATOR

If you have allowed your Private Pesticide Applicator Certification to expire or are a new applicant, then you are invited to attend the Private Pesticide Applicator Certification Training and Examination. It’s a three step process:

Step 1: Register for the training by calling 410-386-2760 at least one week before training date. Stop by the Carroll County Extension Office (or any University of Maryland Extension office) to pick up a copy of the new Maryland Pesticide Applicator Core Manual. Read the manual and go over the review questions at the end of each chapter and practice exam.
Step 2: Private Applicator Certification Training will be conducted at the Carroll County Extension Office (Room K, A, and B) from 10:00 am – Noon on March 5, 2013.

Step 3: Private Pesticide Applicator Exam will be given at the Carroll County Extension Office (Rooms K, A, and B) from 10:00 am – Noon on March 12, 2013.

MARYLAND NUTRIENT APPLICATOR VOUCHER TRAINING

If your Maryland Nutrient Applicator Voucher will expire on December 31, 2012 it is time to attend training. To facilitate training your Carroll County Extension office will have an opportunity for you to take this training on November 7, 2012, 6:00 pm – 8:00 pm at our office. Another opportunity will be offered at the Northern Field Crop Meeting on December 6, 2012, 8:30 – 3:30 pm which will be held at Friendly Farms in Upperco MD, more details will follow. You only need to attend one session. Preregistration one week in advance is required. Call in early to reserve your space as seating is limited and goes quickly.

WOOD STOVE GRANT PROGRAM AVAILABLE & FORESTRY NEWSLETTER

1) The Maryland Energy Administration (MEA) began accepting grant applications for clean burning wood stove installations that displace electric or non-natural gas fossil fuel heating systems as part of its Residential Clean Energy Grant Program. UME has been working with MEA and other partners to increase the adoption of wood energy in MD. This program allows clean and renewable energy to be brought right into the homes of Marylanders.

$50,000 will be available to Maryland home owners who purchase and install approved stick (log) or pellet wood stoves on a first-come, first-served basis. For each individual stove purchased and installed, $400 will be available for stick wood stoves that are Environmental Protection Agency certified and emit no more than 3 grams of PM/hr., and $600 for pellet wood stoves that meet Washington Emission Standards and emit no more than 2 grams of PM/hr.

For more information on the pilot program or to apply for a grant, please visit: http://energy.maryland.gov/Residential/woodstoves/index.html

2) A new issue of “Branching Out” is now available at link below!
Branching Out, Maryland’s Forest Stewardship Education newsletter, is published four times per year by University of Maryland Extension.

“Branching Out” provides educational information, current news and events and is intended to reach anyone interested in forest stewardship including landowners and natural resource professionals.

We encourage you to share this free newsletter with others and invite them to subscribe and review past newsletters by visiting the “Branching Out” Newsletter Page at the link specified below. Feel free to contact Andrew King for further information or questions you may have.

Newsletter: www.naturalresources.umd.edu/Publications/BranchingOut/2012Vol20No1.asp

Subscriptions: www.naturalresources.umd.edu/Newsletter.html

Source: Andrew Kling, Extension Program Assistant, Western MD Research & Education Center, Keedysville, MD 21756, 301-432-2767 x307, akling1@umd.edu
USDA ANNOUNCES HISPANIC AND WOMEN FARMER AND RANCHER CLAIMS PERIOD NOW OPEN

Agriculture Secretary Tom Vilsack recently announced that Hispanic and women farmers and ranchers who allege discrimination by the USDA in past decades can file claims between September 24, 2012 and March 25, 2013.

The process offers a voluntary alternative to litigation for each Hispanic or female farmer and rancher who can prove that USDA denied their applications for loan or loan servicing assistance for discriminatory reasons for certain time periods between 1981 and 2000.

As announced in February 2011, the voluntary claims process will make available at least $1.33 billion for cash awards and tax relief payments, plus up to $160 million in farm debt relief, to eligible Hispanic and women farmers and ranchers. There are no filing fees to participate in the program.

The Department will continue reaching out to potential Hispanic and female claimants around the country to get the word out to individuals who may be eligible for this program so they have the opportunity to participate.

Call center representatives can be reached at 1-888-508-4429. Claimants must register for a claims package (by calling the number or visiting the website) and the claims package will be mailed to claimants. All those interested in learning more or receiving information about the claims process and claims packages are encouraged to attend meetings in your communities about the claims process and contact the website or claims telephone number.

Website: www.farmerclaims.gov
Phone: 1-888-508-4429

Independent legal services companies will administer the claims process and adjudicate the claims. Although there are no filing fees to participate and a lawyer is not required to participate in the claims process, persons seeking legal advice may contact a lawyer or other legal services provider. To read Secretary Tom Vilsack’s entire news release issued today (9/24/12) click on the following link:

Source: USDA

BIENNIAL AND PERENNIAL WEED CONTROL IS BEST IN THE FALL

Fall is an excellent time to manage biennial and perennial weeds. In particular, biennials such as common burdock, wild carrot, and bull, musk, and plumeless thistles are much easier to kill while they are in the rosette stage of growth and prior to surviving a winter. Once they start growth in the spring, they rapidly develop with the goal of reproducing and it becomes more difficult to control them. As you have heard many times before, late summer and fall is the best time to control most perennials with a systemic herbicide because herbicides are moved into the root systems allowing better control. In general, the application window runs from early September through October depending on where you are in the state and what weeds you are targeting. Applications to perennial species like horsenettle, smooth groundcherry, and woody species like multiflora rose should be on the early side of this window, while cool-season perennials like Canada thistle, quackgrass, and dandelion can be effectively controlled after several light frosts. With both biennial and perennials species, adequate leaf tissue must be present and it should be reasonably healthy to
absorb the herbicide. For grass pastures, check the 2011-12 Penn State Agronomy Guide for specific herbicide performance by weed species information and a current product label for use recommendations and restrictions.

The most common herbicides used for broad-spectrum control of many weeds in the fall is glyphosate for grasses and broadleaves and 2,4-D or dicamba (Banvel, Clarity, etc.) for broadleaves. A combination of these products may be the best solution for a mixture of different perennial weeds. For most perennials including hemp dogbane, horsesettle, common milkweed, pokeweed, hedge bindweed, multiflora rose, poison ivy, and wild blackberry, make applications from September 1 through October 15 or before a hard frost. In general, applications by October 1 may be more effective. In northern areas of Pennsylvania, consider making the application before October 1. An additional two week application window can exist for Canada thistle and quackgrass, because of their cool-season habit of growth.

Important considerations:

- Make sure that the foliage on the weeds appears relatively healthy and capable of absorbing the herbicide spray. Plants that have been damaged by insect feeding, drought, harvest equipment, frost, or autumn leaf senescence are not good candidates for fall applications. So, if that pokeweed you have been dealing with during season is still standing and the leaves and stems are not too tattered after harvest, then there is still a great chance to control it yet this fall. Make sure to use adequate herbicide rates, high spray volumes, and get good spray coverage over the plant for effective kill.

- Favorable air temperatures should be a consideration immediately before, during, and after application. In general, the warmer the better, with daytime high temperatures in the mid 50s at a minimum. Cold nights and cool, cloudy days will reduce and slow the effectiveness of the applications. The more active the weeds are growing, the better the herbicide performance.

**On another note:** Fall is the best time to kill declining sod stands (i.e., pure stand alfalfa or mixtures). Although glyphosate is better at controlling alfalfa in the fall than the spring, an additional herbicide application (e.g. 2,4-D/Banvel) or tillage will be required to completely control the alfalfa/mixture. Unless, you plan to get one last spring cutting, now is the time to control that old hay field; don’t wait until spring when it’s more difficult to get an effective burndown kill prior to planting.

*Source: William Curran, Professor of Weed Science, and Dwight Lingenfelter, PNST Extension*

### FALL MANURE MANAGEMENT

When corn silage harvest is done, one of the next jobs we will be looking at is spreading manure. Two important considerations for fall manure application are timing and cover crop management. The best scenario would be if we did not have to apply manure in the fall for corn the next year. With fall applications, significant nutrient losses are almost inevitable because the manure is lying on the field for a long period of time. There are some things that we can do to reduce these losses. Probably the most important thing that we can do is to establish a cover crop where manure will be applied in the fall or winter. Having a cover crop will generally double the recovery of fall and winter applied manure N by next year’s corn crop. Also, if you plan to apply manure during the winter, state regulations require that you either have greater than 25% residue, or an established cover crop. In bare corn silage ground, a cover crop is the only option for meeting this regulation.

Manure can be applied before, or after cover crop establishment. Generally, the priority should be getting the cover crop established, and then spreading manure. This gets the cover crop established in a timely fashion to insure good cover going into the winter. It also delays manure application, which reduces the time the manure is
exposed for loss. It allows the cover crop to start growing so that when manure is applied, the cover crop will be ready to take up the manure nutrients to hold them against loss. Finally, delaying will maybe get us into colder weather, so the manure nutrients will not be released as rapidly, reducing the exposure of the available nutrients to loss. The main downside to applying manure after cover crop establishment is the potential for smothering if high solids manure is applied at a heavy rate. In some cases, applying manure before cover crop establishment is necessary; for example if the storage is full. This will delay cover crop planting until the manure and the soil have dried out enough for planting. Also, with early fall manure applications when the weather is still warm, there is much greater potential for manure N to volatilize unless it is quickly incorporated by tillage or rain. The loss of N at this time of year is similar to what we see with surface applications in the spring. Most of this loss occurs within the first 2 days after application, so if incorporation is not immediate, then there will be little or no N benefit from fall tillage. This creates a dilemma because, while fall tillage may reduce N loss, it opens us up to other losses mainly through erosion. The erosion factor can be reduced if a cover crop is established, but now we are looking at harvesting silage, spreading manure, tilling the soil, and finally planting the cover crop which could get us pretty late into the fall before all of this is done. Low disturbance injectors would be a good alternative for this early fall application, because they get the manure incorporated immediately, no tillage is required, and the cover crop can be planted much sooner.

One final note on fall manure application: Pay attention to soil conditions. Driving heavy manure application equipment on wet soils can result in severe soil compaction that may take years to rectify. This is another reason to get the cover crop established and delay manure applications until better soil conditions are present.

**SUSTAINABLE STOVER HARVEST STRATEGIES**

As grain harvest gets underway, the next harvest in some fields will be a stover harvest as a result of increased demand for bedding and compost. We have been studying stover harvest for the last five years and feel there are some key management considerations that can minimize the impact of harvest on the soil. Stover harvest impacts the soil in three ways: it can increase soil erosion, it can reduce soil organic matter or carbon levels over time, and it can remove soil nutrients. On the positive side, though, removing some stover can help create a better seedbed, eliminate the need for fall tillage, reduce slug pressure, help soils warm up faster in the spring and reduce the inoculum for some crop diseases. If you are considering a stover harvest, think about implementing one or more of these practices to minimize some of the impacts on the soil.

1. Don’t harvest all the stover- leave some behind to provide carbon and soil coverage.
2. Consider applying manure or compost to these fields to add carbon and nutrients. One application of 10 tons of cattle manure with 15% carbon can supply 3000 lbs of carbon compared 1600 lbs of carbon removed in a 2.0 ton stover harvest.
3. Plan to no-till succeeding crops to maintain organic matter and reduce erosion.
4. Plant a cover crop or small grain following a fall stover harvest to increase organic matter and reduce erosion.
5. Alternate fields where stover is harvested, if possible.
6. Replace P and K removed in the stover harvest if necessary. Our data has shown 4 lb P2O5 and 26 lb K2O per ton in the stover immediately following grain harvest.
7. Delay stover harvest until spring. This provides soil coverage over the winter months and allows much of the potash in the stover to be leached back into the soil. In our work in the spring, we found removal rates to be 2.5 lb P2O5 and 7.2 lb K2O per ton.

*Source: Greg Roth, Professor of Agronomy, Chris Houser, Grain Crop Management, PNST Extension*
TAKING ANOTHER ALFALFA HARVEST

Depending on how much forage is in the field, you might be considering taking another alfalfa harvest this fall. Taking a harvest between now and a “killing frost” will add extra stress to the alfalfa plants and increase the risk of weak or thin stands next spring.

Another option would be to wait until after a “killing frost” to take that final harvest. This practice tends to be less risky to the alfalfa stand than harvesting between now and the killing frost. However, knowing when frost has stopped alfalfa growth is tricky because you do not want a warm period after harvesting and the alfalfa to begin growing again. Below are some things to consider when assessing the risks of taking a harvest yet this fall.

- Age of stand: Older alfalfa stands are more likely to winter kill or suffer winter injury following a fall harvest than younger alfalfa stands.
- Variety: Alfalfa varieties with moderate resistance to several diseases and sufficient winterhardiness have greater tolerance to stress from fall harvesting than less disease resistant or winterhardy varieties.
- Soil pH and fertility: Adequate soil pH and fertility minimizes the risk of fall harvesting by allowing alfalfa plants to develop properly and be healthier.
- Soil drainage: Alfalfa on well-drained soils is less likely to suffer winter injury than alfalfa on poorly-drained soils.
- Harvest frequency: Alfalfa harvest schedules which do not allow the alfalfa plant to flower once during the season, predisposes the plant to winter injury.
- Dry conditions in August: Dry weather, especially in August, causes alfalfa to store excess root energy reserves making it more winterhardy.
- Fall cutting height: Leaving six to eight inches of stubble when taking a fall harvest will reduce the risk of winter injury.

Source: Marvin Hall, PNST Extension

WEED MANAGEMENT CONSIDERATIONS FOR FALL SMALL GRAINS

Burndown: For no-till establishment of winter cereals, glyphosate or Gramoxone can be used to control emerged vegetation. If you want to add 2,4-D, the guidelines are less clear. None of the 2,4-D labels specify application just prior to wheat seeding or wheat emergence. The most relevant guidelines on most 2,4-D product labels pertain to use on “fallow ground” or between crops. The general guidelines state that only labeled crops may be planted within 29 days after application and that risk of crop injury or loss is greatest during the first 14 days. The more soluble amine formulation certainly increases the risk for injury. In corn and soybeans, the recommendation for 2,4-D ester is to delay a minimum of 7 days after application at rates up to 1 pint per acre. I believe this is a reasonable precaution to take for barley and wheat as well. However, because the use of 2,4-D burndown in wheat is ambiguous at best and if injury occurs, liability rests with the consultant or applicator. One exception and there may be others is Rage D-Tech, a mixture of carfentrazone (Aim) and 2,4-D ester. Rage-D-Tech is labeled at 8 fl oz per acre with a 3-day planting interval or up to 16 fl oz per acre with a 7-day planting interval in front of small grains. This provides one-half to one pint equivalent per acre 2,4-D ester.

The Banvel and Clarity labels state that application may be made before, during, or after planting of small grains. The Banvel label states that it may be applied at 2 fl oz per acre preplant with no waiting period for wheat (not barley). In contrast, the Clarity label states that it may be applied up to 4 fl oz per acre preplant with no waiting period to wheat (there is no biological reason for the discrepancy between these two labels). For
higher rates and East of the Mississippi, the interval is 20 days per pint per acre for Banvel or 1.25 days per ounce or 15 days for 8 fl oz per acre for Clarity. Bottom line: review a current herbicide label for all use restrictions and guidelines before making an application.

ALS-resistant chickweed: Continue to be on the lookout for this new resistant weed biotype. Control options for resistant chickweed for small grains include Starane Ultra and maybe suppression with 2,4-D plus Banvel. Prowl H2O preemergence to the weed can provide residual control. Starane Ultra is a plant growth regular herbicide marketed by Dow AgroSciences labeled for wheat, barley, and oats. Starane Ultra is applied at 0.3 to 0.4 pints per acre from the 2-leaf crop growth stage up to flag leaf emergence. Starane Ultra will also suppress horseweed/marestail, and several mustard species, but is not the product of choice for other common winter annuals such as henbit, red deadnettle, etc., so tank mixtures may be necessary.

You will likely need to tank-mix with Harmony Extra or another broad spectrum herbicide. Also, Starane Ultra currently has a 120 day recrop restriction to soybeans, so that may also be a consideration. Prowl H2O will suppress common chickweed and should be applied as a postemergence treatment from the 1st leaf stage of wheat until before the flag leaf is visible. Emerged weeds are not controlled by this treatment, but it will provide residual control.

Last fall and spring, we conducted a trial in barley at a farm in Lancaster County. We included some treatments applied at the spike stage on October 29, on November 18, and in late winter on March 19, 2012. Some of the treatments are not labeled for barley, but that’s what we had to work with. Sharpen is labeled for use in small grains preemergence. Metribuzin is labeled in wheat, but not in the Northeast. Axiom, marketed by Bayer is labeled for wheat after the crop has fully germinated; it is a mixture of metribuzin plus flufenacet (Define). Pulsar is a premixed product from Syngenta that contains the active ingredient in Starane (fluroxypyr) plus dicamba (Clarity). The 12.5 fl oz per acre rate provides the equivalent of 0.26 pt Starane Ultra. As you can see from Table 1, Metribuzin, Axiom, Starane Ultra, and Pulsar provided 92% or better control of common chickweed. Control with Harmony Extra ranged from 23 to 77% depending on application timing confirming that we are dealing with an ALS-resistant population. Scout your fields this fall and plan accordingly.

Winter annual grasses: Finally several weedy grasses have become more problematic in the Northeast in small grains. Annual or Italian ryegrass (Lolium multiflorum) is more common to the south in Maryland and Virginia, but can also be found in some fields in Pennsylvania. ACCase or Hoelon resistant ryegrass is a problem in some fields. The annual brome species have also become problematic in our fall seeded small grains. Downy brome (Bromus tectorum) is generally considered the most common of these different winter annual grassy weeds, and although herbicide susceptibility can differ, the biology, ecology and control are similar for the different Bromus species. Most of the cultural control tactics aimed at reducing the problem of downy brome are aimed at things like delayed planting of wheat and controlling with tillage or preplant herbicide and managing to prevent seed production the previous year, etc.

As for herbicides, winter annual grasses, such as downy brome, cheat, annual bluegrass, and annual ryegrass, should be controlled as soon as an inch of new growth has occurred. The wheat herbicides available for control of grasses, Axial, Osprey, PowerFlex, Maverick, Finesse, and Hoelon, are most effective when applied in the fall, and effective spring activity is dependent upon the weeds being small. Be sure to include the necessary adjuvants in the spray mixture and follow label guidelines to minimize risk of crop injury and yield loss. Labels for some products specify the number of tillers or leaves that wheat or barley should have before treatment is allowed. Also, be cautious of crop rotation intervals, certain herbicides such as Maverick have long recrop intervals for typical cropping systems in the northeast.
Table 1. Evaluation of different herbicides for ALS-resistant chickweed control in winter barley. Trial conducted in 2011/12 in Lancaster County PA. Percent control ratings taken on May 3, 2012. Means followed by the same letter are not significantly different from one another at the 5% level.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Formulation</th>
<th>Rate/acre</th>
<th>Application</th>
<th>% Control</th>
</tr>
</thead>
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<tr>
<td>1 Sharpen</td>
<td>2.85 SC</td>
<td>2 fl oz/a</td>
<td>Spike</td>
<td>70 cd</td>
</tr>
<tr>
<td>2 Prowl H2O</td>
<td>3.8 SC</td>
<td>3 pt/a</td>
<td>Spike</td>
<td>85 ab</td>
</tr>
<tr>
<td>2,4-D LVE</td>
<td>4 L</td>
<td>0.5 pt/a</td>
<td>Spike</td>
<td>70 ab</td>
</tr>
<tr>
<td>Clarity</td>
<td>4 L</td>
<td>4 fl oz/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Metribuzin</td>
<td>75 WG</td>
<td>4 oz/a</td>
<td>Spike</td>
<td>92 ab</td>
</tr>
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<td>4 Axiom</td>
<td>68 WG</td>
<td>8 oz/a</td>
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<td>4 L</td>
<td>0.5 pt/a</td>
<td>Spike</td>
<td>70 ab</td>
</tr>
<tr>
<td>Clarity</td>
<td>4 L</td>
<td>4 fl oz/a</td>
<td></td>
<td></td>
</tr>
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<td>5 Harmony Extra XP</td>
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<td>2.8 EC</td>
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</tr>
<tr>
<td>AMS Liquid</td>
<td>100 L</td>
<td>5 gal/100 gal</td>
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<td>0.6 oz/a</td>
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<td>23 cd</td>
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</tr>
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<td>0.3 pt/a</td>
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<td>5 gal/100 gal</td>
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<td></td>
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<td>4 fl oz/a</td>
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<td>Spring</td>
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Source: William Curran, Professor of Weed Science, Dwight Lingenfelter, PNST Extension
DATES TO REMEMBER

November 7  **MD Nutrient Applicator Voucher Training**-6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster, MD, Call to register at 410-386-2760

November 20 **Private Pesticide Applicator Recertification**-6 to 8 pm, Carroll County Extension Office, 700 Agriculture Center, Westminster, MD, Call to register at 410-386-2760

December 6 **Northern Maryland Field Crops Day**- 8:30am-3:30pm, Friendly Farms, Upperco, Maryland, More info to be announced.

February 2 **Mid-Atlantic Small Flock Poultry Expo**-8:30 to 3:30 pm, Carroll County Extension Office & Carroll County Ag Center, 700 Agriculture Center, Westminster, MD, Contact 410-386-2760 or carroll.umd.edu/ag/poultry.cfm

February 12 **Private Pesticide Applicator Recertification**-10 to Noon, Carroll County Extension Office, 700 Agriculture Center, Westminster, MD, Call to register at 410-386-2760

March 5 **Private Pesticide Applicator Certification Training**-10 to Noon, Carroll County Extension Office, 700 Agriculture Center, Westminster, MD, Call to register at 410-386-2760

March 12 **Private Pesticide Applicator Certification Exam**-10 to Noon, Carroll County Extension Office, 700 Agriculture Center, Westminster, MD, Call to register at 410-386-2760


Yours for better farming from your Carroll County Agriculture Extension Educators,

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If you would like to be removed from our mailing list, please call: 410-386-2760 or 1-888-326-9645.

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