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College of Agricultural, Consumer and Environmental Sciences

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Use of Herbicide in Natural Settings

To some, the idea of using herbicides in "natural" settings may seem a little ironic, but in fact herbicides are a useful and valuable tool for land owners and managers. Natural areas including woodlands, prairies, and even hedgerows in urban landscapes can be overtaken by invasive weeds – which are also "natural".

Weeds can alter ecosystems and rob sunlight, water, and nutrients from desirable plants which affects their growth and yield. In this article, we will discuss the pros and cons of herbicide use in these areas, alternative methods of weed control, and common application methods. Of course we typically recommend that non-chemical methods be implemented first before resorting to using herbicides.

Hand or physical removal can result in instant gratification but there may be limitations. Perhaps you have many more weeds than workers. Perhaps the weeds can't be reached due to their location or perhaps



Foliar application. Steve Manning, Invasive Plant Control, Bugwood.org

they must be handled carefully due to possible dermal reactions, which is the case with wild parsnip and poison ivy. Others may have thorns or prickles such as multiflora rose or bull thistle, or an abundance of pollen such as ragweed. Hand digging or

May/June 2021



grubbing doesn't always result in effective control or it may not be possible to remove all the roots. This is certainly the case with larger woody species but even with rhizomatous, perennial spreaders such as Canada thistle or quackgrass. Many of us have experienced the joy of digging up these weeds only to feel the snap of the rhizomes break off and know then that growth will soon return. We may be limited in our physical abilities and physical removal can result in sore muscles. We can use large equipment such as cutters and mowers, but certain woody species will send up shoots after cutting. Often cutting must be repeated and that's time consuming. Large areas or infestations can require many, many manhours.

Herbicides also have pros and cons. These can be used after cutting to prevent new sprouts and provide a more complete kill. They can also provide long lasting, selective, quick control in an efficient manner. Of course this is product dependent. Some herbicides are slower acting than others and some do not provide residual control but instead affect just the weeds present at application. Residual can be good and bad and there are uses for both types. Herbicides are often less labor intensive, less time consuming, and more economical. However, they are not suitable for every situation and off-target movement can occur. This is where the herbicide moves out of the area intended for application and can cause injury.



Untreated stump with sprouts. Rebekah D. Wallace, University of Georgia, Bugwood.org.

Off-target movement can result in much damage to desirable vegetation, humans, and wildlife if we are careless or if weather conditions are not appropriate. It could happen on your property or worse yet on the neighbor's. Drift can be extremely expensive with fines and legal counsel. Pesticides become environmental hazards when they move off-target. Ideally, a pesticide should affect only the target pests and persist no longer than necessary to control them. Problems occur when pesticides are used in a manner that differs from what's directed on the label or when spills occur. Unfortunately, this isn't a new problem. As long as we've had herbicides, we've had off-target movement. Pesticides can help or harm the environment so it's important for users to be aware of the environmental risks and use practices that minimize adverse effects.

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An integrated approach is recommended and referred to as Integrated Pest Management or IPM. The most efficient and successful weed-control programs will include the use of nonchemical controls. These can include cultural controls such as controlling weeds early before they set seed which prevents future weeds, covering bare soil with mulch or groundcovers, using weed free materials to avoid introducing weeds, and cleaning equipment to prevent weed spread. Other methods include controlled burning, biological controls, and mechanical controls including mowing, cutting, girdling, and grubbing. For more effective control, a herbicide may be used immediately following some of these methods.

Herbicides are registered and labeled for legal use in specific areas. The application method or methods will be specified in the label directions. Herbicides can be applied a variety of ways and at different times of year. One very common way would be to the leaves called a foliar application. Also, the bark or cut stumps can be treated and herbicide can be injected into stems or applied to the soil. The method you choose depends on many factors including your target weed, the site, the time of year, available equipment, and the herbicide. Consult with the label for guidance while planning any control effort.

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Some herbicides can be applied to the leaves. This type of application should be limited to herbaceous plants, SMALL trees, and shrubs as there is increased drift potential with tall trees. Foliar treatments are most effective when applied just after full-leaf expansion when food reserves are low in late spring or early summer. Good spray coverage on the leaves is needed. For large infestations, broadcast applications to the entire area would be practical. For clumps of weeds, spray guns can be used for spot treatments using directed spray. For increased application control and to eliminate the risk of non-target injury, a foliar wick or wiping applicator can be used to paint on the herbicide. Certainly offtarget movement can occur with any type of application. However, most often injury occurs from a broadcast application. In situations where off-target drift is a concern, cut stump or basal bark applications would be a better option.

With basal-bark applications, herbicide is applied to the lower 12 to 18 inches of the trunk. This kills the tree and any basal buds that might sprout. Oil-soluble (usually ester) formulations of herbicides are applied in diesel oil or kerosene to penetrate the bark. Non-petroleum based penetrating oils are also available which are less injurious to groundcovers. This technique is for selective control of trees smaller than 4-6 inches in diameter and is less effective on rougher, thicker bark. Treatments can be made throughout the year except when the bark is very wet or covered with ice or snow. Be sure to minimize the amount that runs into the soil as excess amounts can injure or kill adjacent desirable trees and groundcovers and their roots may extend into the treatment area. To reduce possible off-target injury, dormantseason applications may be desirable. Another method of application is the "broad band" or "thin line" which uses a small band (often a pencil thin stream) of a highly concentrated herbicide. This type of application is targeted and precise with low risk to neighboring plants. Be sure to follow label directions as this method will NOT be found on every label.

Certain herbicides may be applied to cut surfaces. With girdling, a herbicide can be applied to the cut for more effective control. Also, herbicide can be sprayed into spaced, horizontal cuts that penetrate the sapwood; this is called hack n' squirt. Alternatively, an injector such as a hypohatchet can be used to dispense herbicide when it is struck into a tree. Also, the E-Z-Ject Lance is a stem injection system that can be used to inject capsules of glyphosate or imazapyr every 4 inches around the base of the stem.

Often cut stumps will resprout but this can be prevented by treating the stump with a herbicide. The label will provide specific directions but typically the sapwood and bark are treated soon after cutting to ensure downward movement. Some labels (especially products containing 2,4-D) instruct users to apply the herbicide to the entire surface of the cut. This is often the case for smaller stems too with various products. Some product labels may call for the use of a penetrating oil. For applications in spring during sap flow and when timeliness of application is a concern, the oil-carried herbicides are recommended. Labels vary on application specifics so read and follow them carefully.

One final concern you should be aware of when controlling trees is herbicide "flashback". This is the passive movement of herbicide from a treated tree to another nearby, nontreated tree through grafted roots, extrusion through the roots, or perhaps from movement through the soil. Unintended injury can result and imazapyr is a known offender.

Lastly, certain herbicides can be applied to the soil to provide residual control and

prevent new weeds from germinating. These can be applied at planting and may be tilled or watered into the soil down to where the germinating seeds are. Some of these herbicides are used in non-crop situations such as along a fence line or driveway to prevent ALL plant growth. These must be used with extreme caution. *Some* are quite mobile in the soil and *some* can persist for several months. Label directions must be followed carefully. Off-target roots can take these up and desirable plants can be injured.

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No matter the control method, each has its list of potential problems and benefits. Herbicides can be used in a variety of ways to help restore or maintain the quality of our natural areas. They are best used as part of an IPM program and should always be used safely according to label directions.

Michelle Wiesbrook

Understanding and Preventing Off-target Movement of Herbicides

Off-target movement occurs when a pesticide moves out of the area intended for application and can cause damage to desirable vegetation, humans, and wildlife. Any pesticide can move off-target but herbicides tend to result in the most easily visible damage. In this article, we will discuss the different types off-target movement, the factors that influence each, prevention, and why this topic is more important now than ever before. When applicators are more informed and have a better understanding of these issues, they can act accordingly to better keep their applications on target.

Pesticides can move off-target by air and by water. When they move by air, we call this drift. Each year, the Illinois Department of Agriculture (IDA) receives on average approximately 120 pesticide misuse complaints, of which 60% are pesticide drift complaints. Recently, it's been higher with the

change in use patterns of dicamba and 2,4-D that are being used more frequently and much earlier (and sometimes later) in the season. There are two types of drift. Particle drift is the movement of spray droplets and it's influenced by nozzle size (which determines droplet size), wind speed, and wind direction. Smaller droplets provide nice coverage on a leaf but weigh less and are carried easily by the wind. Larger droplets are heavier but may roll off the leaf. It's a balancing act for applicators. Prevent particle drift by using drift reduction nozzles that produce fewer small droplets. Operate at a lower pressure and lower your spray height so droplets have a shorter distance to travel to the target site. Do not spray in winds greater than 10 MPH. Do not spray when there is no wind as this can indicate an inversion. Check downwind for sensitive areas and use untreated buffers or return to spray later when winds are blowing away from the area. Additionally, drift reduction adjuvants can help result in larger droplets but you want to



Smoke that flattens out can indicate the presence of an inversion. Michelle Wiesbrook, University of Illinois.

ensure you have a compatible product for your product and equipment.

Inversions are where particles can hang in the air like fog and then move once the wind picks up speed. They are complicated and fortunately are being researched. Inversions are challenging for applicators to identify but smoke that flattens out can indicate the presence of one. They are more likely to occur on clear nights with little to no cloud cover. They begin in the evening, build in intensity overnight, and generally dissipate in the morning once the temperature rises 3 degrees so we recommend applicators wait until then to spray. 5

Vapor drift is the movement of spray vapors or gasses. These can be produced up to several days after application and can travel a few miles. All pesticides are susceptible but some that can volatilize to a significant degree are these herbicides: dicamba, 2,4-D, and clomazone. A very small amount can injure very sensitive plants such as ornamentals, grapes, tomatoes, and soybeans. Vapor drift is influenced by formulation and temperature. Prevent vapor drift by avoiding applications during hot weather. Many labels will direct users to not apply when temperatures are above 85 degrees. Use less volatile formulations when possible. Ester formulations are more volatile than amine formulations. If given a choice and temperatures are warm, go with the amine. Save the esters for cooler weather. Check the label for warning statements. Keep in mind that the applicator is responsible for drift even if it's not easily seen so it's best to use practices to prevent drift.

Pesticides can also move off a treated area with water by runoff and contaminate surface water such as ponds and streams. Erosion can cause contamination if pesticides are attached to the sediments. Many factors affect this including soil and pesticide properties, vegetative cover, volume and rate of water, topography, & climate. Prevent surface water contamination by avoiding treating bare slopes, not spraying before heavy rain, using untreated vegetation filter or buffer strips, and following surface water advisory statements on labels.

Pesticides can contaminate groundwater by run-in and leaching. Run-in occurs when pesticides move directly from the soil surface to the groundwater before they are adsorbed or degraded. Run-in can occur through abandoned wells, cracks, and sinkholes. Shallow aquifers are at greater risk because the distance to travel is short. Pesticides can also move downward through the soil with percolating water. This leaching occurs mainly in sandy, permeable soils. It's a real problem when the water table is close to the surface with shallow wells drawing from it. Leaching is influenced by several factors including pesticide properties (including solubility, adsorption, and persistence), soil properties, site conditions, and management practices including spills, improper disposal of containers and unwanted pesticides, and back siphoning while filling tanks.

Leaching is more likely to occur with sandy soils, groundwater that is close to the surface, and with lots of water moving downward through soil. Additionally, leaching is more likely with pesticides that are highly persistent, poorly adsorbed to soil, and highly water soluble. Prevent leaching by reading and following label directions and check the label for application restrictions; many include water advisory statements. Be familiar with your site conditions and choose products wisely such as those with a lower potential to move.

Of course many problems can be alleviated simply by using other control methods and saving herbicides for when they are absolutely necessary. Scouting should always be used first to determine if there is a need to use chemicals. Use the lowest labeled rate and application frequency to achieve acceptable control. However, if you are dealing with possible herbicide resistance issues, you'll need to use a higher rate per label guidance. Never exceed the labeled rate! Use spot treatments rather than broadcast applications when possible. Lastly, plan well.

Safe herbicide applications start with good planning. To prevent off-target movement or accidental injury, herbicides MUST be used properly! This can be achieved not only by carefully reading and following all label directions but also ensuring that you understand label directions. If you aren't sure how to interpret something, contact the manufacturer through their website or by calling the number on the label. Every product registered for use by EPA will have this statement on the label in the Directions for Use section, "It is a violation of Federal law to use this product in a manner inconsistent with its labeling." The label is the law. Commercial applicators are required to demonstrate learned knowledge with a competency exam to obtain licensure with the Illinois Department of Agriculture. Private land owners are required to test and obtain licensure only if purchasing or applying Restricted Use Pesticides but no license is required for General Use pesticides. General use pesticides are not likely to cause harm to the environment or to the user when used according to label directions and these can be purchased and applied by the general public. Restricted Use Pesticides will state that at the top of the front panel on the label.

When planning an application, there are several factors to consider. Buy only what you plan to use to avoid storage and unwanted product. Ensure you have equipment that works properly. Replace old worn nozzles, cracked leaky hoses or tanks. Ensure you have the appropriate personal protective equipment (PPE) per label directions, including chemical resistant gloves. At a minimum, we recommend you wear a long sleeved shirt, long pants or coveralls, a hat, shoes, socks, and unlined, chemical resistant gloves. More PPE may be required for mixing and loading. PPE must be worn to prevent exposure and pesticide poisoning.

Care should be taken to reduce impacts to non-target species. Environmental risks should be evaluated including the proximity of sensitive plants. How close are they and what are they? Is it your neighbor's vegetable garden? Consider leaving an unsprayed buffer especially if wind is blowing towards sensitive species. Windbreaks can help in certain situations. Consider the weather conditions as well as the proximity to surface water or groundwater. Labels will provide guidance but it's recommended that wind speed be between 3 and 10 mph to help direct the drops to the target but not blow them away. Be prepared to stop spraying if the wind direction shifts or the speed increases. Typically, we want good soil moisture which will aid plant growth and control but we do not want rain too soon after application as it can be washed off. Here again, the label will provide specifics on a rain-free period. Watch your radar for rain, record your wind speed on site at spray boom height with a weather meter. The weather app on your phone is super handy but wind speed can be different from where you are compared to where it is officially recorded. Keeping good application records is just good insurance in case something goes wrong or plants nearby

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show strange growth afterwards.

Herbicide injury on pear. Michelle Wiesbrook, University of Illinois.

To protect water quality, there will be setback requirements provided on the label for bodies of water including wells to protect water quality. For example, a label may state: "Do not apply directly to water" or "May not be mixed, loaded, or used within 50 feet of all wells and sinkholes." For weed control in standing water, be aware that the herbicide must be labeled for aquatic areas. Consider the topography and soil texture. For soil applied products, there may be restrictions based on soil type or even as simple as the use site. Be sure that your primary weed species are listed so you have the right product for the job.

Herbicide injury to off-target plants (more specifically drift injury) is as old as herbicides themselves, but it has become a more common occurrence in recent years. Changes in use patterns of certain herbicides such as glyphosate, glufosinate, paraguat, 2,4-D, and dicamba due to herbicide resistant weeds, the development of herbicide-tolerant crops, and the switch to conservation tillage have contributed to this trend. The level of exposure to gardens and landscape plants has increased with more homes being built in rural areas where these products have been traditionally used. Additionally, bad news travels fast and social media helps accelerate the speed and awareness by prompting others to check their properties for possible damage. Across the state, there have been several reports of damage to crops (especially soybean), but also to landscape plants and most notably trees. Inconsistent temperatures and rainfall cause stress which can increase herbicide sensitivity and herbicide injury can be the breaking point for an already stressed tree. With dicamba, much has been learned over the last few years about factors that can contribute to its volatility including weather and tank-mixing partners. Further label restrictions have been added including detailed record keeping, a temperature and application date cut-off, and required certification with additional training. Applicators do not want their product to drift

any more than the owner of nearby, sensitive plants wants them damaged. Off-target movement is expensive, challenging, and often emotions run high. It is best prevented in the first place. It is imperative that applicators do all they can to keep their applications on target.

For more information on preventing drift, check out the Pesticide Safety Education Program <u>website</u> for newsletter articles, other publications, and online trainings. Our Herbicide Tolerant Crop Stewardship online training was recently updated. This free resource was created for use by producers but is valuable to anyone interested in knowing more about drift as well as desiring to improve neighbor communications related to the issue.

Additionally, another good resource is the North Central IPM Center's <u>"Herbicide Drift</u> <u>Risk Management Working Group</u>" which has factsheets on dicamba and 2,4-D. Specialty crop growers in particular will find these of interest.

Michelle Wiesbrook

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New Application Requirements for Dicamba on Soybeans in 2021

In October 2020, the USEPA renewed the registrations of the three products **XtendiMax with VaporGrip Technology, Engenia Herbicide and Tavium Plus VaporGrip Technology.** Although many of the label restrictions for all remained the same, below is a listing of changes or additions to the federally approved labels. In addition to the requirements of the federally-approved labels, all use of pesticides containing dicamba on soybeans in Illinois must now comply with the following requirements:

Temperature Restriction

Dicamba shall not be applied on soybeans if the air temperature at the field at the time of application is over 85 degrees Fahrenheit or if the National Weather Service's forecasted high temperature for the nearest available location for the day of application exceeds 85 degrees Fahrenheit. Local National Weather Service forecasts are available at <u>https://www.weather.</u> <u>gov</u>.

Cutoff Application Deadline

Application on soybeans of dicamba **shall not** be made after **June 20** of each year for Illinois applicators. The federal Cut-off date is June 30th for Soybeans and July 30th for cotton.

Prior to Application

The applicator shall consult the FieldWatch sensitive crop registry (<u>https://www.fieldwatch.</u> <u>com</u>) and comply with all associated recordkeeping and label requirements.

Wind Direction

Dicamba **shall not** be applied if the wind is blowing toward:

- any Illinois Nature Preserves Commission site that is adjacent to the field of application; or
- an adjacent residential area.

Buffers

In-field, the downwind buffer increased to 240' from 110'.

The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- 1. Roads, paved or gravel surfaces, mowed grassy areas adjacent to field, and bare ground from recent plowing or grading that are contiguous with the treated field.
- 2. Planted agricultural fields containing dicamba-resistant plantings of cotton and soybeans.

3. Areas covered by the footprint of a building, silo, or other manmade structure with walls and/or roof.

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Planted agricultural fields containing corn or crops other than dicamba-resistant plantings of cotton or soybeans are not allowed to be used in the endangered species buffer distance calculations.

Volatility Reduction Agent

A qualified VRA/ pH buffering adjuvant is required for use in the spray tank for every application

Endangered Species Buffers

Downwind buffer increased to 310' from 110'



Illinois counties requiring both a 310-foot in-field wind-directional spray drift buffer and a 57-foot omnidirectional in-field buffer

Endangered Species Counties

This has changed since last year with currently 18 Illinois counties instead of 29. (**Bureau**, **Effingham**, **Fayette**, **Fulton**, **Greene**, **Grundy**, **Kankakee**, **LaSalle**, **Livingston**, **Madison**, **Marion**, **Morgan**, **Peoria**, **Pike**, **Schuyler**, **St**. **Clair**, **Tazewell and Will**.) Visit <u>www.epa.gov/</u> <u>espp</u> for details.

Cleaner Label Structure

The labels now have fewer pages. Only includes pre- and post-emergent uses for DT soybean and cotton – conventional crop and non-crop uses have been removed from the label.

Qualified Hooded Sprayer Option

This has been added to allow for a reduction in spray drift buffers.

5-year Registration Date

Registration ends in 2025.

Additional Training and Record Keeping Requirements-

All records must be generated within 72 hours after application. Sample record forms can be found on manufacturer's website.

Should you have any more questions please check out the recently updated Illinois Department of Agriculture dicamba site at https://www2.illinois.gov/sites/agr/Pesticides/ Pages/Dicamba.aspx or call or 217-785-2427

Compiled by Maria Turner.

Source

Illinois department of agriculture- https://www2. illinois.gov/sites/agr/Pesticides/Pages/Dicamba. aspx

EPA Receives Requests for Voluntary Cancellation of 102 Pesticides

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On May 11, 2021, in the Federal Register, the Environmental Protection Agency (EPA) announced that it had received requests, from product registrants, to voluntarily cancel 102 pesticides. This includes pesticides intended for structural pest, turf, landscape and agricultural use from companies like Syngenta, Bayer, Scott's Company and BASF.

For a complete list of the products to be canceled,

please visit the <u>Federal Register</u> and refer to Table 1 in the PDF.

Existing stocks of most of the products (those produced and packaged prior to the cancellation) can be sold and distributed for **12-months** after the cancellation date. After that, they cannot be sold or distributed with in the US except for disposal.

Some companies requested and were approved for 18-months to sell existing stocks. These companies and products were:

Product Name	Company Name
Flupro-EC	MacDermid Agricultural Solutions, Inc.
Maquat MC5814-80%	Mason Chemical Company
Maquat TC76–40%	Mason Chemical Company
Maquat MQ2525M– CPV	Mason Chemical Company
Maquat TC76–80%	Mason Chemical Company
Maquat-1010N-10%	Mason Chemical Company

One company requested and was approved to sell existing stocks until Sept. 30, 2022. That product was Veratran D by McLaughlin Gormley King Company. Persons other than the registrants, may distribute, sell or use existing stores of these products until they are exhausted, as long as that usage is consistent with the product label.

To learn more please refer to the cancellation notice in the Federal Register:

US Environmental Protection Agency. 2021. Notice of Receipts of Requests to Voluntarily Cancel Certain Pesticide Registrations. Federal Register. Vol. 86, No. 89. pg. 25861-25865.

Sarah Hughson

Illinois Pesticide Misuse 2015-2021

Pesticides are an important management tool in agricultural production. They protect yields and reduce the presence of foreign materials in some commodities. They provide many benefits when used properly. However, it seems we are hearing more and more about pesticide misuse than we have in the past. There are several reasons for this. The use pattern for the herbicide dicamba has changed greatly. We know from personal experience or news

plants yet proper identification can be challenging as symptoms will often mimic that of insects or disease. Plants can become distorted, spotted or even die when exposed to certain pesticides - especially certain herbicides. Often the wind has carried a pesticide away from its intended target and onto neighboring susceptible vegetation. When injured plants are found and a pesticide is suspected to be the cause, a person can call the Illinois Department of Agriculture (IDA) Bureau of Environmental programs and file an official complaint. An investigation then takes place and a determination is made concerning whether or not pesticide misuse (a label violation) has occurred.

IDA reports misuse numbers yearly. The chart below takes a look at the pesticide misuse complaints filed from 2015-2021. These years are highlighted to show a picture of the trends we are seeing including what pesticide misuse looked like prior to dicamba use in soybean in 2017 and then with new stricter regulations established in 2020. As indicated in the bar chart, ag-related complaints still have a ways to go before they are back to the low numbers we saw in 2015 and 2016, but

reports that pesticide misuse can have serious consequences. Due to the immediacy of today's media, newsworthy errors are known to many people quickly. Most recently as more folks are working from home, they are more aware of



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it appears the label restrictions placed on soybean applications of dicamba in 2020 are working to reduce the number of misuse cases compared to that of recent years.

IDA also received

sprayers out in fields. Furthermore, as urban areas expand more readily into rural areas, some spray applications are made closer to homes than in the past. In areas like this, the public's tolerance for misapplications is very low. Herbicide injury can be easily noticed on numerous informal complaints in recent years. Often people just wanted a problem to be recognized without a formal record. Fortunately, many of the concerns brought to IDA's attention were alleviated quickly with educational information. These inquiries allow the IDA to educate consumers about pesticides and provide them with resources like those found on the National Pesticide Information Center (NPIC) website and the University of Illinois Pesticide Safety Education Program website. It is IDA's goal to resolve these types of issues quickly and separately to allow the program to dedicate more resources to complex, high-risk investigations.

With formal complaints, initial allegations often raise concerns, but it is common for many investigations to conclude that the evidence does not demonstrate pesticide misuse. These investigations still provide an opportunity to verify compliance however. Additionally, what can complicate matters a bit is vapor drift, which is capable of traveling a few miles from an application. In 2019, atmospheric conditions contributed to more instances of vapor drift. If vapor drift is suspected but the source cannot be determined, a label violation cannot be found. When violations are found, the outcomes include different administrative actions, such as sending written warning letters, notices of fines, or penalties issued.

Misuse complaints and cases can be reduced with proper pesticide use which starts before application. Take time to observe the surrounding area. Look for children, nearby farm workers, and sensitive crops. Then, read the label. If vapor drift is a concern, label statements will direct users so that it can be avoided. Some label directions specify the maximum wind speed for application. Other labels simply indicate the product should not be used when weather conditions favor drift. Strong winds blowing pesticides onto surrounding properties result in the largest number of complaints, so care should be taken to apply when winds are between 3 and 10 mph and directed away from sensitive vegetation. Other precautions include leaving a buffer strip, increasing droplet size, lowering spray pressure and using a drift control additive. Finally, keep accurate, detailed records,

including wind speed and direction during application.

Should a complaint need to be filed, it must be received within 30 days of the incident or when the damage was first noticed. If a person waits to file the complaint, it will be recorded but no action will be taken. Please note that the Department's role in pesticide misuse incidents is limited to determining whether a violation has occurred. The IDA cannot help complainants recover damages. For more information, call the Illinois Department of Agriculture, Bureau of Environmental Programs at 1-800-641-3934 (voice and TDD) or 217-785-2427.

Maria Turner

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2021 Agricultural Container Recycling Schedule

The Illinois Department of Agriculture has announced the single-day collection sites and dates for the 2021 Pesticide Container Recycling Program. Dates and locations are available on the Illinois Department of Agriculture website. <u>https://www2.illinois.gov/sites/agr/Environment/Agrichemicals/Pages/Agrichemical-Container-Recycling-Program.aspx</u>.

Year-round disposal is available at three permanent collection sites. Please call to ensure the facility will be open.

- Griggsville, IL. Logan Agri Sry, Inc., contact Josh Schaver, 217-833-2375
- Lawrenceville, IL. Klein Flying Service, contact Robert Klein, 618-884-1040
- Carmi, IL. Klein Flying Service, contact Bri Klein, 812-890-8605

The Illinois Department of Agriculture is encouraging farmers and agrichemical facilities to save their empty agrichemical containers. Beginning in late July and continuing in August, single-day sites throughout the state will collect containers. The containers will be recycled to make shipping pallets, fence posts, drainage tubing, plastic lumber and other useful products. Over 1.6 million pounds of plastic have been collected since the program started more than 20 years ago.

Metal and household pesticide containers are not eligible for the recycling program. Collection sites will accept only highdensity polyethylene, #2 plastic agrichemical containers that are clean and dry. Participants are responsible for rinsing them and removing all caps, labels, booklets and foil seals.

Mini-Bulk and Intermediate Bulk containers can be recycled via the Department's container recycling program by making the following container preparations: Mini Bulk (cage) containers are required to be cut into separate top, bottom and sides, fittings discarded (no metal, no wood) (6 slabs of plastic). Intermediate Bulk Containers are to be cut into 1-foot square pieces, fittings discarded (no metal, no wood). In 2021, G. Phillips and Sons, LLC Began offering services to pick up Mini-Bulk and Intermediate Bulk containers throughout the year. Please feel free to contact G. Phillips and Sons, LLC at 678-232-6047 to learn more about their Mini-Bulk and Intermediate Bulk container collection service.

The program is a cooperative venture between the Illinois Department of Agriculture, Agriculture Container Recycling Council, GROWMARK, Inc., Illinois Fertilizer and Chemical Association, G. Phillips and Sons, L.L.C., Illinois Farm Bureau, and the University of Illinois Extension.Additional information can be found on the IDOA website at agriculture.illinois.gov, click on the "Environment" tab and then "Agrichemicals". To obtain a free brochure about the program, call the Illinois Department of Agriculture toll-free at 1-800-641-3934.

Preparing pesticide containers for recycling:

Rinsing right after use is the best way to ensure a clean container. Depending on what system fits your operation, you can either triple rinse or pressure rinse your containers. Your local agricultural chemical dealer can give you more information about pressurized rinse systems.

Triple Rinsing

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- 1. Fill the empty container about 20% full with water.
- 2. Replace the cap securely and shake the contents to rinse all inside surfaces.
- 3. Pour rinse water into the spray tank and drain for at least 30 seconds.
- 4. Repeat steps 1-3 twice more until the container is clean.
- 5. Inspect the container (inside and out) for formulation residues. Repeat as needed.

Pressure Rinsing

- 1. Use a special nozzle attached to a water hose.
- 2. Hold the container upside down over the spray tank with the cap removed. Puncture the side of the container with the pointed nozzle.
- 3. Pressurized water cleans the inside surfaces while the rinsate flows into the spray tank.
- 4. Rinse for 30 seconds or longer while rotating the nozzle to rinse all surfaces.
- 5. Inspect the container (inside and out) for formulation residues. Repeat as needed.

Illinois Department of Agriculture, May 11, 2021 press release, modified by Travis Cleveland

IDOA Schedules Clean Sweep Collection

Residents of ten Illinois counties can dispose of unwanted agrichemicals for free this year through the Illinois Department of Agriculture's (IDOA) agricultural pesticide "Clean Sweep" program.

"Clean Sweep" collections have been scheduled in late summer for Clay, Edwards, Gallatin, Hamilton, Hardin, Pope, Saline, Wabash, Wayne and White counties. The collection, which rotates among Illinois counties, is open to farmers, retired farmers, nursery owners, private pesticide applicators, structural pest control applicators and landowners who inherited unwanted agricultural pesticides with their property.

"There are two main reasons to take advantage of this program," said Brad Beaver, Acting Bureau Chief of Environmental Programs. "One, the Department is able to provide the service free of charge thanks to a grant obtained from the U.S. Environmental Protection Agency. If individuals were to properly dispose of agrichemicals on their own, it would be expensive. Secondly, the state of Illinois, not the program participant, will assume liability for the proper disposal of all materials collected."

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Participants must register the products they plan to dispose of by Thursday, July 22. Registration is required to give the waste disposal contractor time to prepare for the different kinds of materials that will need to be handled. Forms can be obtained either by calling the Illinois Department of Agriculture's Pesticide Hotline at 1-800-641-3934, online at https://www2.illinois.gov/sites/agr/Pesticides/ Pages/Pesticide-Clean-Sweep-Program.aspx.

Completed forms should be mailed or faxed to the Illinois Department of Agriculture. The mailing address is: Clean Sweep Program, Illinois Department of Agriculture, State Fairgrounds, P.O. Box 19281, Springfield, IL, 62794-9281. The fax number is (217) 524-4882. Participants then will be sent a reservation card indicating the date, time and location of their collection.

The "Clean Sweep" program began in 1990 in Illinois. Since the inception of the program, the Department has held 51 collection events through the state and collected 609,619 pounds of material from 2,177 participants. Visit IDOA's website for a complete listing of the 2021 Clean Sweep Program sponsors.

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