

Chapter 11 - Vegetation Management

Introduction

The important point to remember in managing vegetation on airports is that the primary purpose of grass on airports is to prevent wind and water erosion, and to reduce dust. The airport manager should have some knowledge of plants, ways to control weeds and the proper use of herbicides in order to control problem plants on the airport. This chapter will provide various aspects of information on managing vegetation on an airport, such as the various areas of an airport in need of weed control, the safety precautions needed for herbicide use, and also information on problem weeds and their suggested controls.

Managing Turf Areas

A good turf is maintained by frequent watering, fertilizing, re-seeding, and intelligent mowing. Using enough fertilizer and heavy seeding is recommended for a vigorous and fast growth. Unless grass is cut at regular intervals, weed growth increases to such an extent that eventually even the most hardy grasses will be crowded or choked out. Frequent cutting develops a thick and dense turf which is essential on an airfield to keep dust down, cover loose particles of sand and gravel, absorb rainfall more readily, and aid in the prevention of erosion.

The first step in defining a turf-growing plan is to notice that different areas of the airport will require different treatment. Seeding will be satisfactory for general areas that are level, but sod will be better for ditches, drainage areas, and new construction. Fertilizer will be a necessity in some sections of the airport and/or for some soils, but only a convenience in other areas.

Seeding

Before planting, the soil should be prepared to support the growth of a thick healthy turf. Lime usually promotes plant growth and should be added before the soil is worked, if the soil is lacking in lime. A good commercial fertilizer will help the grass to grow vigorously, decrease weed growth, and form a dense sod. After the soil is well-worked, the seed is sown. For grass legume mixtures, 60 to 90 pounds of seed per 1.5 acres; for grasses like rye grass, 70 pounds; and for small grasses like red top and timothy, 20 to 30 pounds usually make a good cover. The rate of seeding should be materially reduced in dry areas. Seed should be planted only 1/8 or 1/4 inch deep. A grass drill, grain drill with grass-seed attachment, or a wheelbarrow type broadcast seeder is needed for large areas. If the broadcast seeder is used, the seed should be covered by means of a cultipacker or a spiked-tooth harrow.

Small areas can be planted with a hand-operated whirlwind seeder if the seed is to be covered by means of a corrugated or perforated roller. Caution must be exercised, as a heavy roller or an overrolled area may pack the surface and form a crust through which seed cannot grow. On poor soils, slopes, and eroded areas, a very light mulch of straw, hay, or manure should be added immediately after seeding for protection. Heavy jute mesh may also be used to stabilize newly graded ditches or slopes, preventing erosion until vegetation becomes established.

Temperature and rainfall are the major factors which determine choice of any grass. Any of the species recommended for non-irrigated areas may be replaced with a species adapted to more humid regions providing it is in the correct temperature group. A few of the grass species adapted for airports in various regions are listed below:

TEMPERATURE GROUP	HUMID OR IRRIGATED	SUB-HUMID OR NON-IRRIGATED
Warm Season	Bahiagrass	Bermuda
	Bermuda	Gramagrasses
	Carpetgrass	Little bluestem
	Centipede	Sand dropseed
	Dallisgrass	Weeping lovegrass
	Zoysia	
Cool Season	Chewings fescue	Bromegrass
	Crested wheatgrass	Crested wheatgrass
	Kentucky bluegrass	Tall oatgrass
	Red fescue	Western wheatgrass
	Tall fescue	

If you start a turf from seed on a new airport, or on a new construction area, a minimum of two growing seasons following the original seeding will be required to obtain an adequate foundation turf--one that will provide protection for the soil and be free of eroded or killed spots. And until the turf is well established, newly graded areas will be very susceptible to erosion.

Sodding

Sodding requires more labor than seeding, but may be necessary on such critical areas as drainage outlets or steep slopes. Sod strips should be laid along the contour lines of the slope, fitted snugly together, rolled to remove all air pockets, and watered frequently. The joints on alternate strips should be staggered and all holes filled with good soil. The lowest strip, or alternate strips on some slopes, may have to be pegged to hold the sod in place. A sod cutter is necessary, but no other special equipment is needed except tamping tools. Take sod 1-1/2 to 2 inches thick from pastures or other areas then roll it up and lay it at once to prevent drying or heating. Cut sod just thick enough to hold together during rolling and unrolling. A thin sod starts more quickly and less material has to be moved to cover the same amount of area.

For broadcast sodding with rootstalk grasses such as Bermuda or Kikuyu, tear up sod to be moved with a disk harrow. Lift sod with power shovels or draglines into dump trucks. Scatter it in the area and level with a grader without attempting to preserve the sod.

Weed Control

Weed control can sometimes be a serious problem. However, a weed cover may prevent dust and erosion and help in establishing a stand of permanent grass in light rainfall areas.

Weeds should not be permitted to spread, but complete elimination of nonpoisonous species is rarely necessary. Weeds can be classified as either annuals, with roots living but one year, and biennials or perennial, with roots living 2 or more years. Noxious weeds are usually creeping perennials which usually spread from roots or seed and are extremely difficult to kill.

Birds have an instinctual need to see other birds while they are feeding, therefore birds tend to be attracted to areas of low cut grass. Since some weeds produce seeds that attract insects, which in turn attract birds, it is important to keep all turf areas free of weeds. Therefore, maintaining a turf area that is between 7 inches to 14 inches high, is an effective method in discouraging the attraction of large and small flocking birds. Most annuals and a few perennial can be killed by mowing just as the blossoms begin to open. Because various weeds blossom at different seasons, mowing at least twice a year is usually necessary.

Although weed-killing chemicals are expensive and may be dangerous, they are useful on small areas for killing individual plants or groups of plants, or for keeping down all vegetation adjacent to runways, taxiways or aprons. Ammonium sulfamate, sodium chlorate, and sodium arsenate are among the chemicals generally used.

Runways, Taxiways and Other Paved Surfaces

Applying herbicide prior to paving will prevent growth if the base material is known or suspected to contain seeds or other plant parts. Apply the herbicide after the base is compacted and just prior to applying the prime coat. Either granules or sprays can be used, but sufficient water must be applied to dissolve the granules.

Pavement Edge

The most common cause of damage to pavement edges, as well as the pavement itself, occurs when uncontrolled vegetation grows onto and into the soil/pavement intersection. Most airport vegetation management personnel prefer to maintain a narrow band of exposed soil, free of vegetation outside the pavement edge. Treatment of the soil prior to paving does not prevent the vegetation from entering the pavement edge from outside the pavement. Weeds should not be allowed to obstruct views of any runway and taxiway edge lighting systems. Also, weeds and grass along the pavement edges should be cut at regular intervals to allow for proper drainage.

Runway Shoulder

Grassed runway shoulders can be maintained by mowing. If weeds intrude this area, then they should be treated. As stated earlier, no weeds or grass should be allowed to obstruct views of any runway and taxiway edge lighting systems. Also, keep a well manicured runway shoulder to allow for proper drainage.

Lights

All grass and/or weeds surrounding navigational aids and lighting fixtures, should be maintained as frequently as possible. In no way should by overgrown turf or weeds obstruct views of these lights.

Outfield

The outfield is usually mowed. Treatment chemicals are available to reduce the amount of mowing needed in these areas.

Drainage Ditches

Controlling weeds and brush along ditches makes these ditches more efficient. Weeds and brush can decrease the flow capacity of a ditch by as much as 30%, which in turn can cause flooding to neighboring areas of an airport, producing a safety hazard along with causing significant property damage.

Controlling these weeds and brushes through a herbicide vegetation management program provides an easier long-term solution for controlling the weed problem.

Controls For Specific Persistent Weeds

Plants that are undesirable to any operation are called "weeds". The backbone of any vegetation management operation is plant identification.

Bermuda Grass

Bermuda grass is an aggressive, warm-season grass and grows in all regions of Louisiana. It can grow through or intrude from outside an asphalt pavement. Seeds lodging in cracks or joints of asphalt or concrete sprout and form new plants. Some recommended controls can be found below.

FORMULATED HERBICIDE CONTROLS	SPRAY VOLUME
<i>Roundup</i> applied at 5 quarts per acre (3 ounces per gallon of water per 1000 square feet)	10 - 40 gallons of water per acre
<i>Dowpon</i> applied at 5 to 10 pounds per acre plus 1/4% surfactant	25 to 50 gallons of water per acre plus 1 quart of surfactant per 50 gallons of water

Dowpon should be applied when the grass is 4" to 6" tall and actively growing. Delay disturbing the area for at least three (3) days.

Johnson Grass

Johnson grass is an aggressive, active weed that spreads by seeds and by extending its root structure.

Some recommended controls for Johnson grass can be found below.

FORMULATED HERBICIDE CONTROLS	SPRAY VOLUME
<i>Dowpon</i> applied at 5 to 10 pounds per acre plus 1/2% surfactant	50 to 100 gallons of water per acre plus 1 quart of surfactant per 50 gallons of water
<i>DSMA</i> (<i>disodium methanearsonate</i>) applied at 6.0 pounds per acre or <i>MSMA</i> applied at 4.0 pounds per acre plus 1/2% surfactant	50 to 100 gallons of water per acre plus 1 quart of surfactant per 50 gallons of water
<i>Roundup</i>	2 to 3 quarts per acre

Apply *Dowpon* when the grass is 8" to 16" tall and actively growing. Delay disturbing the area for at least three (3) days. Apply *DSMA* or *MSMA* (*monosodium acid methanearsonate*) when air temperature is 70° F or above for best results. Use this treatment when the grass is actively growing and retreat the area as needed. *Roundup* should be used on sites where non-selective weed control is needed.

Nutsedge

Some recommended controls for Nutsedge can be found below.

FORMULATED HERBICIDE CONTROLS	SPRAY VOLUME
<i>Eptam 6E</i> at 1 gallon per acre	20 to 40 gallons of water per acre
<i>Roundup</i> applied at 2 to 3 quarts per acre	10 to 40 gallons of water per acre

Apply *Eptam 6E* after existing stands of Nutsedge have been destroyed. Mix into the soil 4" to 6" deep immediately after application. This technique should contain the Nutsedge for two to three months.

Vegetation Control For Asphalt Pavements

When trying to control vegetation prior to installing asphalt pavements or controlling weeds in existing asphalt pavements, application of herbicide becomes an effective control method. However, vegetation such as trees and shrubs may be damaged or even killed if their roots grow into an area of herbicide treated soil.

Some suggested herbicides and application methods for vegetation control under asphalt pavements can be found in **Table 11.1**.

Table 11.1: Suggested Herbicide Application Methods For Vegetation Control Under Asphalt Pavement

TYPE AND RATE OF HERBICIDE	TIME TO APPLY	WEEDS CONTROLLED	REMARKS
<i>Borascu</i> at 4,840 lbs. per acre	Apply just ahead of prime coat.	All weeds controlled.	Apply dry. Mix into the soil to 4" depth. Thorough mixing is needed for proper bonding of asphalt to base material.
<i>CBM</i> (Sodium chlorate plus sodium metaborate) at 240 gallons per acre.	Apply just ahead of prime coat in 200 gallons of water per acre.	All weeds controlled.	Weeds from adjacent areas may grow under edge of pavement.
<i>Hyvar XL</i> at 12 gallons per acre or <i>Hyvar X</i> at 30 lbs. per acre.	After shaping and prior to compacting.	All grasses, sedges and broadleaf weeds.	After spraying, mix into the top 6" of material with rotary equipment.
<i>Pramitol 25E</i> at 25 gallons per acre or <i>Pramitol 80 WP</i> at 60 lbs. per acre.	Same as above.	Same as above.	Same as above. Do not apply <i>Pramitol</i> under asphalt coating less than 3" thick.
<i>Treflan</i> at 3.0-4.0 gallons per acre.	Same as above.	Grasses and some broadleaf weeds.	Use sufficient water to insure thorough wetting of soil.
<i>Spike 80W</i> at 5.0-20.0 lbs. per acre.	Same as above.	Broadleaf weeds and grasses.	Rate depends on weeds to be controlled. See label.

Some suggested herbicides and application methods for vegetation control in existing asphalt pavements can be found in **Table 11.2** below.

Table 11.2: Suggested Herbicide Application Method For Vegetation Control In Existing Asphalt Pavement

TYPE AND RATE OF HERBICIDE	SPRAY VOLUME	WEEDS CONTROLLED	REMARKS
<i>Roundup</i> at 5 quarts per acre.	Apply in 10-40 gallons of water.	Broadleaf weeds and grasses.	Annual weeds; 2 ounces per gallon of water per 1000 square feet. Bermudagrass, Nutsedge, and other perennial weeds; 3 ounces per gallon of water per 1000 sq. feet.

Other treatments used for soil sterilization can also be used to treat the soil under the pavement. *Hyvar* is more effective in controlling Nutsedge than many of the other herbicides listed. All of the soil sterilization treatments may injure vegetation some distance from the edge of the pavement. *Hyvar*, *Karmex*, *Aatrex*, and *Pramitol* may injure trees adjacent to the treated area.

Herbicide Use

Herbicides can aid an airport manager in controlling vegetation in large areas such as exists on airports. The airport manager should have some knowledge of the different types of uses, effects, and application methods in order to choose a method that is both effective and environmentally sound to animals and humans.

If herbicides are handled or applied improperly, or if unused portions are not disposed of safely, they may be injurious to humans, domestic animals, desirable plants, fish and other wildlife, and contaminate water supplies. Use herbicides only when needed and handle them with care. Follow the directions and heed all precautions on the container labels.

As with any chemical, all containers of herbicides should properly labeled to avoid misuse. When label instructions and proper application techniques are used, herbicides should perform as expected and present no undue hazard.

In case of an accidental spill, contact the manufacturer or the Louisiana Department of Agriculture and Forestry and the Department of Environmental Quality (DEQ) for instructions. For information on purchasing herbicide through state contracts, please contact the nearest Department of Agriculture Louisiana Cooperative Extension Service office from the listing provided at the end of this chapter.

Broadcast Spraying

Most airports, because they have such large areas to treat, use some type of broad spraying techniques. This may be accomplished by equipping mowing vehicles with containers and sprayers able and approved to store herbicides.

When using this spraying technique, all areas under the applicator or spray nozzles will be affected. Many vehicles are equipped with booms containing multiple spray nozzles to cover the most area at a given time. Flat spray nozzles are the most common used. These types of nozzles come in various angle patterns to give the user the most accurate spray coverage.

Setting these nozzles in a uniform fashion along a boom setup and making sure they are at the appropriate height, will greatly reduce overlap or spraying zones. However, a certain amount of spray overlap is recommended to assure areas will not be missed. There are some spray nozzles designed to spray wider angles, yet they are not as accurate and more susceptible to wind conditions because of their large spray area.

All personnel who use herbicides should be trained and made aware of the potential hazards they can create if used improperly. Individuals should never mix herbicides, or any other chemical

for that matter, alone. Each herbicide container is properly labeled with care instructions, handling instructions and personal protection instructions. Have all personnel; who use these herbicides regularly read these instructions carefully and be thoroughly familiar with them.

The Louisiana Department of Agriculture and Forestry periodically provides seminars and training sessions in the proper use of these herbicides. Contact your local Agriculture office or the Louisiana Cooperative Extension Service office nearest you for more information. A listing of all statewide offices of the Louisiana Cooperative Extension Service is provided at the end of this chapter.

Spraying Equipment Calibration

Correct calibration is of great importance. An excessive amount of herbicide may cause damage to the applied area and increase herbicide costs. Insufficient amounts will probably not be effective in weed control. Sprayers and granular distributors should be checked for output before making a treatment. Following treatment, clean equipment and dispose of any unused spray properly.

Agricultural Aviation Operations Area

Airports that have agricultural aviation operations should designate an area that will be used only for such operations. An agricultural operations area should be defined as the area on an airport that is used for loading agricultural airplanes. Depending on the volume of agricultural operations and whether it is economically feasible, it may be necessary to add an additional designated operational area. One area can be designated for the handling of liquid chemicals and the other area can be designated for the handling of dry non-toxic materials.

The designated agricultural operations area should be considered a special purpose area and should be designed to operate separately from the general aviation areas of the airport. This will allow the area to be restricted to agricultural aircraft and their support equipment only and will yield the highest level of safety and efficiency. In addition, the area should also restrict access from any public roads and any unauthorized personnel from the agricultural operations area.

Chemical Handling Area

The chemical handling area should be located within the designated agricultural area. This area will be used for all aspects of handling liquid chemicals used for agricultural operations. Some of the aspects of handling liquid chemicals will include:

- Chemical handling
- Chemical mixing
- Loading or discharging chemicals onto or from the agricultural aircraft
- Washing the aircraft's internal spray system

Due to the fact that asphalt pavements tend to absorb spilled liquids and the effects of some of the liquid herbicides on asphalt pavements are unknown, it is recommended that the chemical

handling area be designated only on Portland Cement Concrete aprons. This area should be underlaid with a material that will not allow any seepage through to the underlying soil. This portion of the apron should be located away from drainage courses that might collect any chemical spills and thus contaminate the storm water drainage system. This apron area should also be sloped to a collection drain that will collect any spills and also collect any wash water. The liquids collected should be disposed of according to all Louisiana regulations and by a licensed non-hazardous waste disposal company and should be prohibited from entering the storm drainage system. This contractor could also be contracted to collect and dispose any other non-hazardous wastes on the airport property not particularly associated with only agricultural operations.

Dry Material Loading Area

Generally, when aircraft agricultural operations use dry non-toxic materials, an area needs to be designated to allow enough space for the loading and unloading of this material. This area needs to allow room for the transport trucks delivering the material, the aircraft, and the hopper trucks that transfer the material from the transport trucks into the aircraft. Since these areas can be quite large, it may not be economically feasible to establish an area specifically for material handling. In some cases, these areas can be placed adjacent to the chemical handling areas, at closed runways or taxiways, or if large enough, on the general aviation apron. In each case, these areas should be restricted and kept separate from general aviation activities.

Herbicide Material Storage

When dealing with herbicides and other chemicals, it is of primary concern that these materials are kept in a clean, secured, locked area. Improper storage, use and disposal of these materials can result in environmental contamination. The best way to prevent pollutant problems is at the source. Prevent or reduce the discharge of these pollutants by storing materials in a designated area, by installing secondary containment, by conducting regular inspections, and by training all employees on the proper uses of these materials.

As stated, an area should be designated for material delivery and storage. Keep an accurate, up-to-date inventory of the materials delivered and stored on-site. This will help in determining what type of response is needed in the event of a spill. Keep your inventory low by storing only the amount of materials that you need for a specific task. Whenever possible, store materials in a covered and/or enclosed area with a secondary containment such as an earthen dike, metal pan, or other containment device. These materials should not be stored directly on the ground. Drums or bagged materials should be placed on pallets and covered to prevent exposure to rainwater.

The designated storage area should be kept clean and well organized. The designated storage area should be routinely checked for external corrosion of material containers. An ample supply of spill cleanup materials should also be kept near the storage area.

Louisiana Cooperative Extension Service

The Louisiana State University's Agricultural Center has instituted an extension service throughout the State for persons who seek assistance with agricultural questions or problems.

The service, known as the Louisiana Cooperative Extension Service, has an office located in every parish of the State. If you need more information on vegetation management or you have questions concerning any other facets of agricultural operations on your airport, please seek the office nearest you from the list provided.

Acadia Parish Office

157 Cherokee Drive
Crowley, LA 70526-4353
337/788-8821

Allen Parish Office

104 South Fourth Street
P. O. Box 188
Oberlin, LA 70655-0188
337/639-4376 or -2985

Ascension Parish Office

9039 St. Landry Road
P. O. Box 1659
Gonzales, LA 70737-
225/621-5799 or 225/473-6582

Assumption Parish Office

119 Robin Street
Napoleonville, LA 70390-0188
985/369-6386

Avoyelles Parish Office

136 South Lee Street
Marksville, LA 71351-2609
318/253-7526

Beauregard Parish Office

401 West First Street, Room 26
P. O. Box 609
De Ridder, LA 70634-0609
337/463-7006

Bienville Parish Office

2710 Maple Street
Arcadia, LA 71001-3606
318/263-7400 or -7401

Bossier Parish Office

Courthouse Bldg., Room 309
P. O. Box 370
Benton, LA 71006-0188
318/965-2326

Caddo Parish Office

2408 East 70th Street
Shreveport, LA 71105-4702
318/226-6805

Calcasieu Parish Office

7101 Gulf Highway
Lake Charles, LA 70607
337/475-8812

Caldwell Parish Office

106 Jackson Street
P. O. Box 1199
Columbia, LA 71418-1199
318/649-2663 or - 5802

Cameron Parish Office

10086 Gulf Highway
Grand Lake, LA 70607
337/905-1318

Catahoula Parish Office

Courthouse Bldg. Room 302
P. O. Box 160
Harrisonburg, LA 71340-0160
318/744-5442

Claiborne Parish Office

507 West Main Street
Homer, LA 71040-0299
318/927-3110

Concordia Parish Office

Old Courthouse Bldg.
405 Carter Street, 3rd Floor
Vidalia, LA 71373-3336
318/336-5315

De Soto Parish Office

10117 Highway 171
Grand Cane, LA 71032
318/872-0533 or -0641

East Baton Rouge Parish Office

805 St. Louis Street
Baton Rouge, LA 70802-6457
225/389-3055

East Carroll Parish Office

502 First Street
Lake Providence, LA 71254-9998
318/559-1459

East Feliciana Parish Office

4419 Idlewild Road
Clinton, LA 70722-0338
225/683-3101

Evangeline Parish Office

230 Court Street
Ville Platte, LA 70586-4493
337/363-5646

Franklin Parish Office

Courthouse Building
6252 Main Street
Winnsboro, LA 71295
318/435-7551

Grant Parish Office

200 Main Street, Suite 5
Colfax, LA 71417-1863
318/627-3675

Iberia Parish Office

Courthouse Building, Suite B-110
300 Iberia Street
P. O. Box 10025
New Iberia, LA 70560
337/369-4441 or -4440

Iberville Parish Office

23640 Peters Street
Plaquemine, LA 70764
225/687-5155

Jackson Parish Office

Courthouse Building
500 East Court Street, Room 302
Jonesboro, LA 71251
318/259-5690

Lafayette Parish Office

Parish Government Building
1010 Lafayette Street, Suite 325
Lafayette, LA 70501-6884
337/291-7090

Lincoln Parish Office

201 North Vienna Street
Ruston, LA 71270-4464
318/251-5134

Morehouse Parish Office

9609 Marlatt Street 71220 (zip code)
P. O. Box 192
Bastrop, LA 71221-0192
318/281-5741 or -5742

Ouachita Parish Office

704 Cypress Street
West Monroe, LA 71291-2922
318/323-2251

Rapides Parish Office

300 Grady Britt Drive
Alexandria, LA 71302
318/767-3968

Sabine Parish Office

1125 West Mississippi Avenue
Suite B
Many, LA 71449-3125
318/256-3406

St. Helena Parish Office

23 South Main Street, Suite B
P. O. Box 1505
Greensburg, LA 70441-0306
225/222-4136

Jefferson Parish Office

6640 Riverside Drive, Suite 200
Metairie, LA 70003-7110
504/838-1170, -1171, -1172

Lafourche Parish Office

402 West Fifth Street 70301 (zip code)
P. O. Box 429
Thibodaux, LA 70302-0429
985/446-1316

Livingston Parish Office

Old Courthouse Bldg.
20180 Iowa Street, Room 106
P. O. Box 158
Livingston, LA 70754-0158
225/686-3020

Natchitoches Parish Office

624 Second Street
P. O. Box 225
Natchitoches, LA 71458-0225
318/357-2224

Plaquemines Parish Office

479 F. Edward Herbert Blvd, Suite 201
Belle Chasse, LA 70037
504/433-3664

Red River Parish Office

2015 Red Oak Road
P. O. Box 1364
Coushatta, LA 71019-1364
318/932-4342

St. Bernard Parish Office

St. Bernard Government Bldg.
8201 West Judge Perez Drive
Chalmette, LA 70043-1611
504/278-4234

St. James Parish Office

Courthouse Building
5800 Highway 44, Third Floor
P. O. Box 64
Convent, LA 70723-0064
225/562-2320

Jefferson Davis Parish Office

1006 Lake Arthur Avenue
P. O. Box 1407
Jennings, LA 70546-1407
337/824-1773

La Salle Parish Office

Courthouse Building, Room 22
North First and Courthouse Street
P. O. Box 101
Jena, LA 71342-0101
318/992-2205 or -4179

Madison Parish Office

114 North Cedar Street
Tallulah, LA 71282-3811
318/574-2465 or -2483

Orleans Parish Office

6400 St. Claude Avenue
Building 104-C
New Orleans, LA 70146
504/838-1170

Point Coupee Parish Office

Courthouse Annex
180 East Main Street, First Floor
New Roads, LA 70760-3500
225/638-5533

Richland Parish Office

702 Madeline Street
P. O. Box 179
Rayville, LA 71269-0179
318/728-3216

St. Charles Parish Office

1313 Paul Maillard Road, Suite E
P.O. Box 1766
Luling, LA 70070
985/785-4473 or -4474

St. John Parish Office

P. O. Box 250
Edgard, LA 70049-0250
985/497-3261

St. Landry Parish Office

1065 Highway 749, Suite A
Opelousas, LA 70570-9298
337/948-0561

St. Martin Parish Office

114 Courthouse Street
Breaux Bridge, LA 70517
337/332-2181

St. Mary Parish Office

Courthouse Building
500 Main Street, Room 314
Franklin, LA 70538-6199
337/828-4100, Ext. 300

St. Tammany Parish Office

1305 North Florida Street
P. O. Box 5438 70434 (zip code)
Covington, LA 70433
985/875-2635

Tangipahoa Parish Office

305 East Oak Street
P. O. Box 848
Amite, LA 70422-0848
985/748-9381 or -5462

Tensas Parish Office

Courthouse Annex
203 Hancock Street
P. O. Box 319
St. Joseph, LA 71366-0319
318/766-3222

Terrebone Parish Office

511 Roussel Street 70360 (zip code)
P. O. Box 627
Houma, LA 70361
985/873-6495

Union Parish Office

210 Water Street
Farmerville, LA 71241-3030
318/368-9935

Vermillion Parish Office

1105 West Port Street
Abbeville, LA 70510-5831
337/898-4335

Vernon Parish Office

201 South Third Street
P. O. Box 559
Leesville, LA 71496-0559
337/239-3231

Washington Parish Office

1104 Bene Street, Suite B
Franklington, LA 70438-1135
985/839-7855

Webster Parish Office

1202 Homer Road
Minden, LA 71055-3082
318/371-1371

West Baton Rouge Parish Office

210 Turner Road
Port Allen, LA 70767-0498
225/336-2416

West Carroll Parish Office

10284 Highway 17
P. O. Box 620
Oak Grove, LA 71263
318/428-74444

West Feliciana Parish Office

5924 Commerce Street
P. O. Box 1934
St. Francisville, LA 70775-1934
225/635-3614

Winn Parish Office

119 West Main Street, Room 108
Winnfield, LA 71483-3201
318/628-4528

References

Louisiana State University Agricultural Center, Louisiana Cooperative Extension Service, "Louisiana's Suggested Chemical Weed Control Guide for 2007"

The Louisiana Department of Transportation and Development, "Small Airport Design"