

University of Louisiana at Lafayette's Intergrated Pest Management Plan (IPM)

As defined in [7 U.S.C. § 136r](#), IPM is “a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.” - [USDA](#)

Objectives of the University of Louisiana at Lafayette's IMP Plan:

- a. Protect human and environmental health on campus.
- b. Be proactive. Preventing pests is the number one priority rather than treatment.
- c. Identify and monitor pest species on campus to understand how to properly prevent them.
- d. Safely eliminate significant threats caused by pests to the health and safety of campus occupants
- e. Protect outdoor Living Laboratory spaces that advance student learning.
- f. Protect environmental quality inside and outside buildings.
- g. Prevent loss or damage to structures and property by pests.
- h. Build in pest control into the design of new construction and natural environments

Benefits of the IPM:

- a. Reduce the number of pests.
- b. Reduce the number of pesticide applications.
- c. Save money while protecting human health.

Best Practices: Five steps of a Intergrated Pest Management Plan

1) Identify the Pest

- a) Most species of living things are NOT pests but are contributing members of the broader ecosystem so be sure to identify that the insect is a pest before any action is taken.
- b) Identify acceptable pest level thresholds that do not pose a threat to campus and its occupants.
- c) Identify and monitor the various types of pests found on campus to make better informed decisions on management of pests.

2) Monitor Pest Activity

- a) By monitoring pest populations over time, you can determine if there are enough pests present to be concerned about potential damage.
- b) Regular monitoring ensures that unnecessary treatments are avoided.
- c) Maintain records for each building detailing:

- i) Monitoring techniques
- ii) Location
- iii) Inspection schedule
- iv) Record monitoring results and inspection findings, including recommendations.

d) Monitor:

- i) Pest populations
- ii) Areas vulnerable to pests
- iii) The efficacy of prevention and control methods.

3) Determine Action Thresholds

- a) An action threshold is the pest population level at which the pest's presence is a:
- i) Nuisance
 - ii) Health hazard
 - iii) Economic threat

4) Treatment

- a) Pest control is required if action thresholds are exceeded. IPM programs use the most effective, lowest risk options considering the risks to the applicator, building occupants, and environment. Control methods include:
- i) Pest trapping
 - ii) Heat/cold treatment
 - iii) Physical removal
 - iv) Pesticide application
- b) Prevention should be a priority. There are many treatment options besides pesticides, and prevention should always be considered first.
- c) In landscaping environments, seek to eliminate the underlying causes of plant diseases, weeds, and insect problems rather than only attacking the symptoms (the pests).
- d) In urban environments, exclusion is key. Using screens and caulking goes a long way to keeping pests out. Increasing levels of sanitation often plays a big role in preventing pests.
- e) Pest control shall be managed through prevention, physical and mechanical, and through the purchase of environmentally friendly products. As a last resort, use of the least toxic pest control substance is allowed.
- f) Remove conditions that attract pests, such as food, water, and shelter.
- g) Preventive actions include:
- i) Reducing clutter.
 - ii) Sealing areas where pests enter the building (weatherization).
 - iii) Removing trash and overgrown vegetation.
 - iv) Maintaining clean dining and food storage areas.
 - v) Installing pest barriers.

- vi) Removing standing water.
- vii) Educating building occupants on the IPM.

5) Evaluate Results and Maintain

- a) Documenting pest control actions is critical in evaluating success and should include:
 - i) An on-site record of each pest control service, including all pesticide applications, in a searchable, organized system.
 - ii) Evidence that non-chemical control methods were considered and implemented.
 - iii) Recommendations for preventing future pest problems.
 - iv) Maintain records for each building detailing as defined in section 2c and evaluate the effectiveness of treatment strategies.

University of Louisiana at Lafayette's Treatment Standards

1. General Standards

- i. Abide by all state laws pertaining to pest control and prevention. Refer to [Louisiana Department of Environmental Quality's LAG870000](#).
- j. Focus efforts on preventive measures to keep pest problems to a minimum. A reactionary approach to pest control management is less effective and it wastes time, resources, and money.
- k. Organic ground management and using the least toxic pest control methods are preferred when possible.
 - i. Ecologically preferable materials include [OMRI Listed products](#) (Organic Materials Review Institute) and/or products listed/certified by an IFOAM-endorsed standard. Consistent with the NOFA Standards for Organic Land Care, rescue treatments using non-organic pesticides to control insects and disease problems that can cause significant harm are allowed, providing there are no effective organic alternatives.
 - ii. If a pesticide needs to be used, choose the most targeted, reduced risk product available. Try to avoid applications where pollinators are foraging. Avoid using pesticides when plants are in bloom in the area.
- l. Avoid overuse of pesticides, fungicides, fertilizers, and herbicides applications. These applications are acceptable if other preferred methods fail to keep pests at acceptable levels. Any application must minimize unintended consequences, such as harm to people and pollinators.
 - i. We want to avoid use of chemical fertilizers and herbicides when possible because chemical-based products can damage the soil ecosystem supporting tree /plant growth, directly or indirectly damaging/killing roots. The University expends resources (composted mulch, microbe

culture and organics injected into root zone) to reinforce these supportive microbes and it is senseless to damage that with chemicals.

- m. Monitor and reduce the usage of unneeded fertilizers, pesticides, herbicides, and other treatment chemicals.
 - i. Continue to remove unneeded fence lines that need to be regularly treated.
- n. Use pollinator friendly pest management applications especially near protected pollinator habitats (see diagram 1, 2)
- o. Use caution when using weed whackers near young trees or pollinator habitats. Weed whackers are not allowed in Protected Pollinator Habitat's without coordinating with the Office of Sustainability.
- p. The preferred method of removing poison oak/ivy plants is through removal by hand pulling or mechanical grubbing. Herbicides may be used as a secondary treatment with caution for nearby plants and trees. Never burn or use weed whackers against poison-oak/ivy, since it creates a serious health hazard and doesn't effectively reduce infestations.
- q. Regularly check that windows and doors are properly sealed to prevent pests from entering.
- r. Refer to the pesticide label for proper storage and disposal instructions.
- s. Clip pastures after each grazing rotation at Cade farm. This helps suppress weed growth by creating a more competitive condition for our desirable grasses. Make use of the Roto-wiper applicator. This is a slow spinning, carpet-covered drum that is raised to a height where the drum only comes in contact with the undesirable species.
- t. When a pest is identified in a campus building, instruct building users on how to change their habits to prevent the spread of pests.

2. Prevention and Treatment Methods for Ants, Bees, Wasps, Termites, and Rodents

i. Ant infestation standards

1. **Prevent:** Take preventive measures by plugging any holes in the foundation and walls, keep campus clean and clear of debris, ensure food is properly stored and not left out, ensure all doors and windows are properly sealed and weatherproofed, and dumpsters should be kept always closed.
2. **Treat:** Ant infestations shall be treated with the least toxic option that is still effective when problem areas are identified.
3. Treat ants at athletic fields and fields used for reactional sports once a month and/or as needed.
4. Ant treatments around campus should be done through specific requests for ant removal.

ii. Bee / Wasp infestation removal standards

1. **Prevent:** Take preventive measures by plugging any holes in the foundation and walls, keep campus clean and clear of debris, ensure all doors and windows are properly sealed and weatherproofed, and dumpsters should be kept always closed.
 2. **Treat Bees:** Contract out with a licensed beekeeper or bee removal specialist to safely and effectively remove the hive without causing harm to the bees. Remember that bees are important pollinators that play an essential part in any healthy, thriving eco-system, remove bees in a safe eco-friendly manner.
 3. **Treat Wasps:** Disrupt Pheromone Trails and treat as needed according to the pest control contract.
- iii. Termite infestation standards
1. **Prevent:** Take preventive measures by conducting the annual termite inspection, plug any holes in the foundation and walls, keep campus clean and clear of debris, ensure all doors and windows are properly sealed and weatherproofed, remove dead trees and tree stumps in a timely manner, schedule regular inspections, and keep landscaping elements such as mulch at least 4" from the foundation of structures.
 2. **Treat:** Continue the use of eco-friendly Entricon System bait traps. Liquid treatments and combination of bait and liquid treatments are allowed.
 3. Monitor locations where termites have been identified and treat them in a timely manner. Identify the type of termite to better inform the type of treatment to seek.
 4. Use the recommended [EPA Termite prevention and non-chemical treatment strategies](#)
- iv. Rodent infestation standards
1. **Prevent:** Take preventive measures by plugging any holes in the foundation and walls, keep campus clean and clear of debris, ensure all doors and windows are properly sealed and weatherproofed, landscaping elements should be trimmed at least 12-18" away from buildings, remove potential nesting materials in unused spaces, dumpsters should be kept closed at all times, and monitor areas where dropping have been found.
 2. **Treat:** Treat infestations with traps. Preference for deploying traps with nonpoisonous baits, sticky traps, and live traps but other methods are allowed when necessary.

Coordinate Treatments

- b. Do not cut/mow pollinator habitats without approval from the Office of Sustainability. Dedicated pollinator habitats are Living Laboratory spaces dedicated to learning where classes take samples and study species, biodiversity, and green infrastructure. These no-mow areas can be identified with signs and with the Protected Managed Landscapes Map provided by the Office of Sustainability. *(Diagram 1,2)*
- c. Be sensitive to pollinator habitats. Avoid unnecessary applications of pesticides in or around these areas. Contact the University's Bee Campus USA committee if there is a problem with a pollinator habitat for guidance. Refer to the Protected Managed Landscapes Map provided by the Office of Sustainability. *(Diagram 1,2)*
- d. Be sensitive to trees. Avoid unnecessary applications of pesticides around trees and their surrounding landscaped areas. Contact the University's Tree Campus USA committee and Bob's Tree Preservation if there is a problem with a tree's landscaping for guidance. Bob's Tree Preservation assists in keeping our campus trees healthy and does not treat them with harmful chemicals.
- e. Replace unhealthy plants if they are prone to pests and if efforts to improve their health have failed. Sometimes the right course of action is to remove the plant and replace it with something better suited to the landscape. There are many native species of plants that can help control and naturally deter pests. Contact the University's Ecology Center for guidance. Remove or relocate plants or trees that have started growing too close to buildings.
- f. Do not use neonicotinoid use on campus without consulting the University's Bee Campus USA Committee. Neonicotinoid pesticides are a class of chemicals that act as insecticides by exerting neurotoxic effects via irreversible binding to insect nicotinic acetylcholine receptors. Because nicotinic acetylcholine receptors are also present in the nervous systems of mammals, there is concern that neonicotinoids may impact animals other than their insect targets, including humans – [The National Institute of Environmental Health Sciences – National Toxicology Program](#)
- g. [Housing Handbook](#) Pest Management regulations: The Office of University Housing manages a “proactive program to eliminate pests (roaches, ants, spiders, etc.). All residence halls and apartments are treated monthly. Additionally, there are perimeter treatments designed to eliminate unwanted pests from our residence halls and apartments. Poor housekeeping in rooms can be an attraction for a pest looking for a new home or food. Students who notice pests in their rooms should notify their RA/CA immediately.” (5)
 - i. Refer to the Mandatory Bed Bug Preparation Checklist for Bed Bug Procedures in Housing areas.
 - ii. General steps for treating pests in housing areas:
 1. Report
 2. Identify and Confirm

AmeriCorps + Office of Sustainability: Managed Landscapes

1 Rec Sports Complex - Intramural Fields - Tree Planting



2 Coliseum Road - Tree Planting



3 Bourgeois Park Urban Prairie Coulee Planting

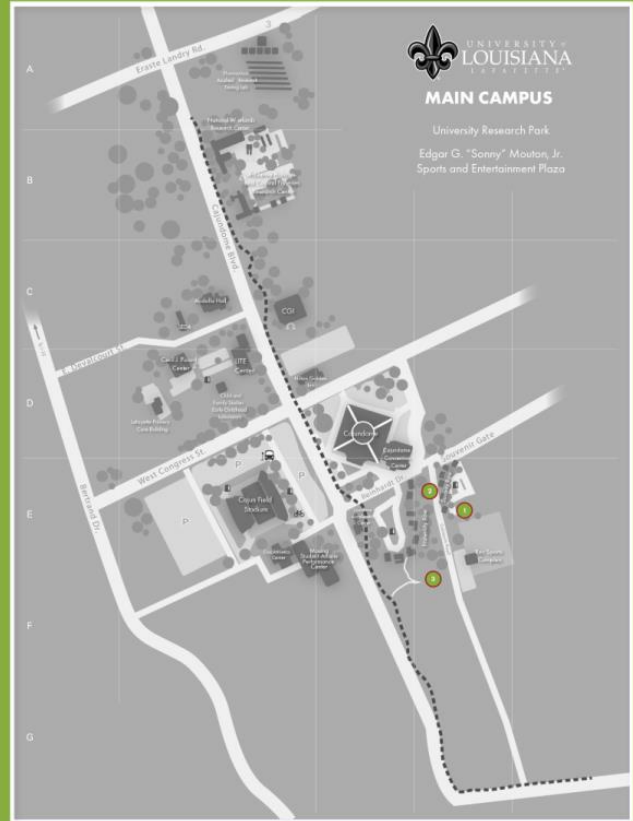


Diagram 2 - Protected Managed Landscapes Map of the Research Park

The University of Louisiana at Lafayette's Intergrated Pest Management Plan is intended to be a living document, subject to change, to reflect changes in contracts and changing landscapes as the University grows.