



United States Department of the Interior

NATIONAL PARK SERVICE
Gateway National Recreation Area
210 New York Ave., Staten Island, N.Y. 10305

IN REPLY REFER TO:
N50 (GATE-NRM)

June 26, 2008

Memorandum

To: All GATE Employees

From: Chief, Division of Natural Resources

Subject: Integrated Pest Management (IPM) Program, Information and Procedures

1. This memorandum serves to inform GATE employees of the National Park Service (NPS) management policies and procedures relative to the NPS Integrated Pest Management (IPM) Program. The Division of Natural Resources administers this program for GATE in accordance with federal laws and regulations, U.S. Department of the Interior Manual, Chapter 1; NPS Management Policies 2006, Chapter 4; and NPS Northeast Regional policies and procedures.

2. Integrated Pest Management Defined

Basically, IPM is "...a decision-making process that coordinates knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage by cost-effective means while posing the least possible risk to people, resources, and the environment" (NPS 2006).

The Department of the Interior, Departmental Manual, Part 517 (2007) uses the definition from the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136r-1): "Integrated pest management 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."

Integrated Pest Management is required practice for the federal government, as well as most state and local governments, many private enterprises, pest control professionals and informed citizens. The IPM concept involves much more than just limiting the use of pesticides. The basis tenet of IPM is to first consider alternatives to pesticides in the management and control of pests. Often, the alternative methods may be the most efficacious and/or the most cost-effective.

3. Using IPM in Park Planning

Integrated Pest Management can be used to facilitate and enhance project planning. For example, if there is an annual wasp or carpenter ant issue in the park, planning ahead for their arrival next year so that management options can be identified, could eliminate or greatly reduce the amounts of pesticides required for control. Taking this a step further, adequate planning to eliminate the conditions that caused the pest issue may be implemented, thus resolving the problem along with the need for pesticide application. This also means that IPM should be part of the planning process for every construction and rehabilitation project at GATE. If we use construction designs that actually create conditions favorable for pest invasion, then we can only blame ourselves for the problems this causes. It does not take much time to prevent big pest issues down the road.

4. Using IPM to Reduce Health and Environmental Risks

Pesticides are designed to kill the target organisms (plant or animal). Despite the remarkable differences that distinguish different kinds of living things from one another, the substance and function of all life on earth is similar in many ways. The DNA molecule is the template from which all physical structure and life processes originate, often via long sequences of biochemical events, once the DNA has produced the first link in such a chain. Details of the DNA molecule vary from species to species and indeed between individuals. But the basic structure of this molecule is the same in a rat, a flea, a cabbage, a racehorse, or a human. So are many of the substances for which DNA “codes.” Hence, the cells of our bodies contain many of the same proteins, carbohydrates, enzymes, and other building blocks as do those of a fish, an oak tree, or an earthworm. They also carry out many of the same processes: respiration, protein metabolism, etc. So, because we share these commonalities with other organisms, a substance that is toxic to a target pest is likely to be toxic, at some level, to humans as well.

Also of concern is the impact of the product on what we call “non-target organisms,” including our pets, beneficial insects, songbirds, native and ornamental plants, and the entire ecosystem that provides us with food, construction materials, shade, beautiful scenery and our relatively high quality of life.

Herbicides and pesticides are highly dangerous poisons, which, if used at all, must be used in accordance with rules set forth by the IMP program. As in medicine, “an ounce of prevention is worth a pound of cure,” that is, in the long run it requires less time, money and effort (even when compared to the significant initial output of all three) to prevent a pest from invading a space in the first place, than to eliminate it once it has become established.

5. Federal Pesticide Use Requirements

Federal law (FIFRA 1972) requires the National Park Service and all federal agencies regulate and track the use of pesticides, avoid any unnecessary use, and use the least dangerous products available, while striving to provide adequate pest control. The enforcement of the law has been delegated to the individual States. All States require that pesticides/products are purchased and

used by trained/certified individuals. Although the State enforcement personnel do not visit NPS units every year to check on our use, storage, and disposal of chemicals, we are still required to record all pesticides we use.

6. Procedure for Requesting Pesticide Use

Following FIFRA regulations and NPS policy on pesticides, we make our best efforts to avoid the overuse of chemical products to the maximum extent practicable, while also seeking the most effective and economical way to deal with each pest problem. To achieve this, the Department of the Interior (DOI) has developed the Pesticide Use Proposal System (PUPS). This system requires park managers to request authorization to use a pesticide. If you are considering using, or contracting the use of a chemical pest control product anywhere on GATE property (including inside dwellings and other park buildings), please follow this procedure:

- Contact the GATE IPM Coordinator, Dr. Michael Byer at 718-354-4543 (office) / 917-881-4654 (cell), or by e-mail at michael_byer@nps.gov;
- provide a description of the pest(s) (i.e. mice, roaches, poison ivy, invasive exotic plants);
- provide the location of the pest infestation (as specifically as possible); and
- provide the approximate area to be treated (in square feet, acres, etc).

It is not necessary to specify a product. The Regional IPM coordinator will make recommendations on the suitability of a product for a specific target pest and conditions. A contractor or pest control operator (PCO), will usually specify a commonly used product. In any case, Dr. Byer will submit your request to the Regional IPM Coordinator.

7. Pesticide Use Proposal System (PUPS) Coordination and Approval

The PUPS process is relatively straightforward and a response to a request is typically received within one or two days, unless the regional coordinator suggests a different product and/or method. In any case, the total turnaround should not exceed 4-5 business days. In some “emergency” cases, verbal approval may be obtained the same day.

Please be aware that the GATE IPM Coordinator, Dr. Byer, has no authority to approve or disapprove a request. His responsibility is to receive your request, collect the required information, and coordinate the response from the Northeast Regional IPM Coordinator who, in turn, makes the decision.

The PUPS review and contracting process require coordination, since contractor’s bids are based partly upon the product and procedure for pesticide use. The successful bidder’s recommended product and procedure are submitted to the regional coordinator as part of the PUPS request. If the product / procedure do not meet regional IPM standards, they may be rejected. An approved product / procedure are then substituted. The PCO may be accustomed to using a particular

procedure for a specific type of pest problem and may be unfamiliar with the recommended product and methodology. Although this may delay approval, generally a PCO who is familiar with the use of a product/procedure that is considered safe and approved by the IPM program, can be located within a few days.

If you have any questions regarding IPM and/or the above-mentioned procedures, please contact me or Dr. Byer at (718) 354-4510 and (718) 354-4543, respectively.

/s/

Douglas A. Adamo

LITERATURE CITED

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). 1947. Title 7 U.S.C. 136-136Y.

U.S. Department of the Interior, National Park Service. 2006. Management Policies. U.S. Government Printing Office, Washington, D.C. 168 pp.

U.S. Department of the Interior. 2007. Departmental Manual, Chapter 1, Part 517. Office of Environmental Policy and Compliance. 5 pp.