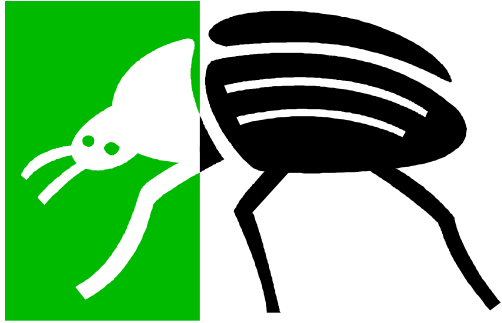


Integrated Pest Management Presentation

Governor's Task Force on Safer
Chemicals



What is IPM?

Integrated Pest Management (IPM) is:

- Sustainable approach to managing pests
- Integrates a variety of prevention and control tactics with other property management practices for holistic, systematic scheme
- Combines physical, cultural, mechanical, chemical and/or biological strategies to disrupt pests
- Minimizes economic, health, and environmental risks.

WHY is IPM Needed?



Yellow jacket

Pests Pose Risks to People and Property

- **Direct Injury:** stinging insects, lice
poison ivy, plant pests, wood- destroying
pests
- **Spread Infectious Disease:** Salmonella,
Lyme disease, West Nile virus, EEE,
malaria
- **Trigger Allergies/Irritations:** asthma,
dermatitis



Why be Concerned About Pesticide Use?



Pesticides Pose Risks, too

- **Acute health risks:** poisoning, allergic reactions, skin, respiratory, eye irritations.
- **Long-term health risks:** Tumors, cancer, birth defects, blood and nervous system disorders.
- **Human sensitivity to pesticides varies:** kids, MCS, and others especially sensitive
- **Environmental Impacts:** water/soil/air pollution, harms non-target organisms, increases pest problems,
- **Economic costs**



What are Pesticides?

Any chemical intended to kill a living organism

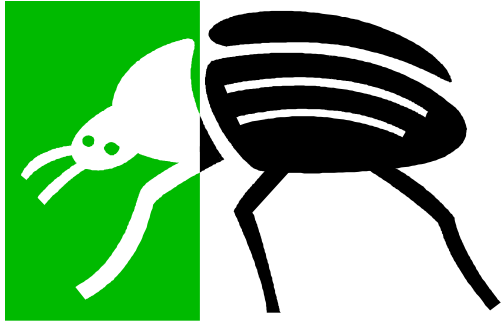


Including:

Herbicides: weed-killers

- Disinfectants: Bleach, *Lysol*, antibacterial soap
 - Rodenticides: Rat/mouse poison
- Fungicides: plant disease sprays, mildew treatments
- Insecticides: sprays, ant cups, granules, powders, etc
 - Insect Repellents
 - Wood Preservatives
 - Some GMO crops





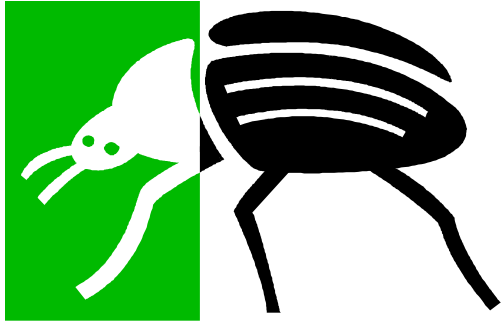
IPM Basics

- Monitor and identify pest populations
- Utilize multiple tactics (biological, mechanical, chemical, physical) to prevent and manage pests
- Pest management actions adjusted based on known pest density and tolerance level for the site
- Evaluate effectiveness and adjust plan and tactics as needed

Effective IPM Requires Planning

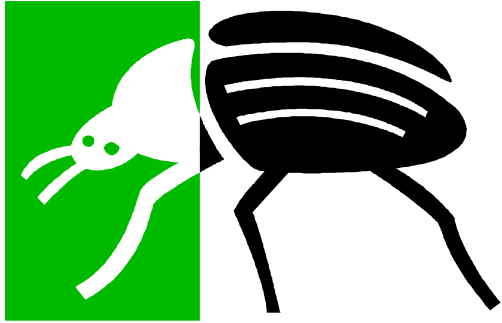
Develop a written site-specific IPM plan for each property including:

- Occupant and facilities staff training
- Occupant/management/contractor communication procedures
- Pest monitoring and management procedures
- Pest prevention procedures
- Evaluation procedures
- Detailed contract specifications if contractual services utilized



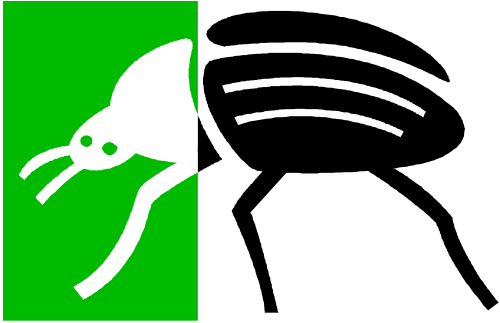
IPM for Buildings

- Develop site-specific IPM plan for each building
- Keeping buildings clean, dry and well-maintained
- Seal pest entryways: cracks, crevices, doors, windows, vents, etc.
- Monitor for pests at least monthly
- Get positive identification of pests
- Follow established IPM guidelines for management of structural pests
- Keep records: pest monitoring & sighting logs, pest control records
- Evaluate program annually and adjust IPM plan as needed



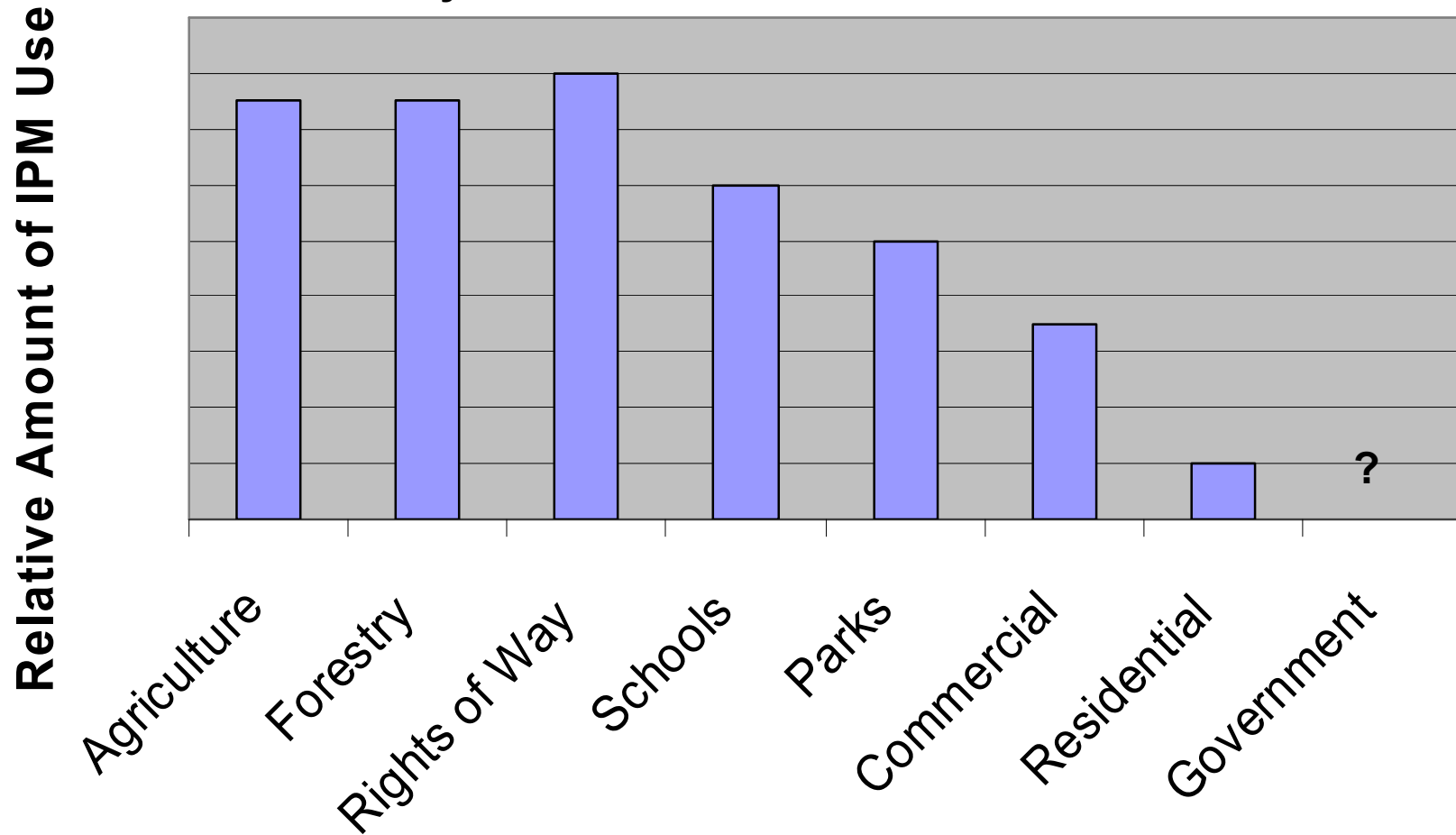
IPM for Grounds

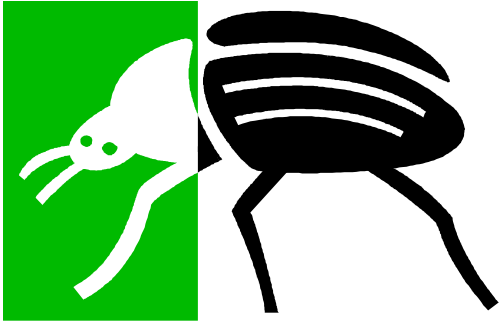
- Plant diverse, pest-resistant, site appropriate, non-invasive plants and grasses
- Select cultivars requiring less fertilizer, water, and pesticides
- Plant vegetative buffers to protect surface waters
- Keep pesticides & fertilizers off pavement
- Conserve natural enemies by avoiding pesticides
- Monitor plants and lawns regularly for pests or problems.
- Get a positive identification of pest or problem
- Follow established IPM guidelines for ornamental and turf pests
- Use sensible low-risk methods: plant coverings, hand-weeding & bug-picking, pruning, etc.



How Much is IPM Used?

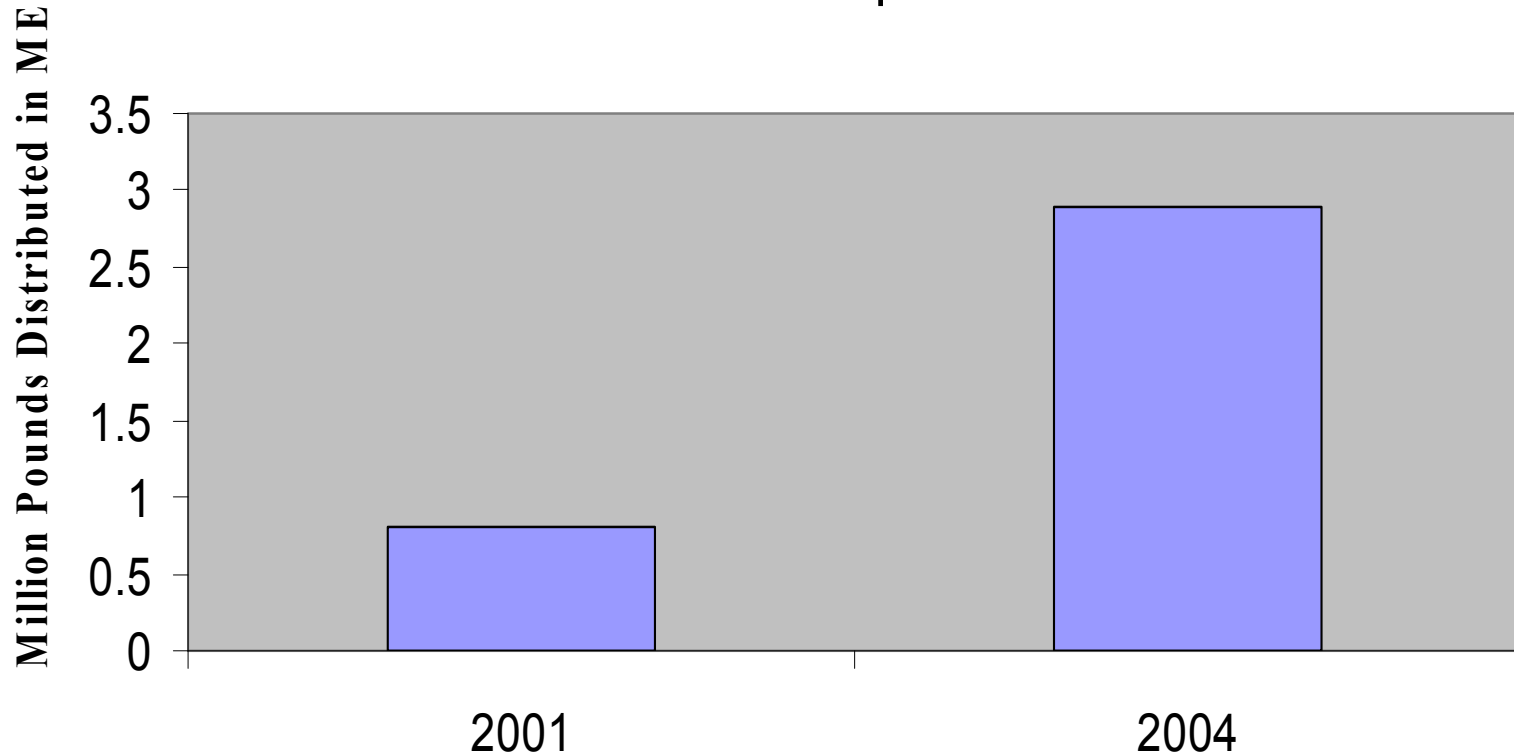
Kathy's Guesstimate: these are not real data!

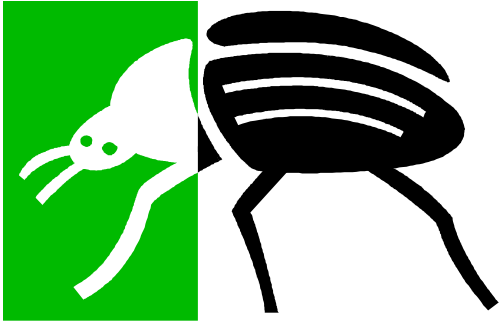




Residential Pesticide Use in Maine is Increasing

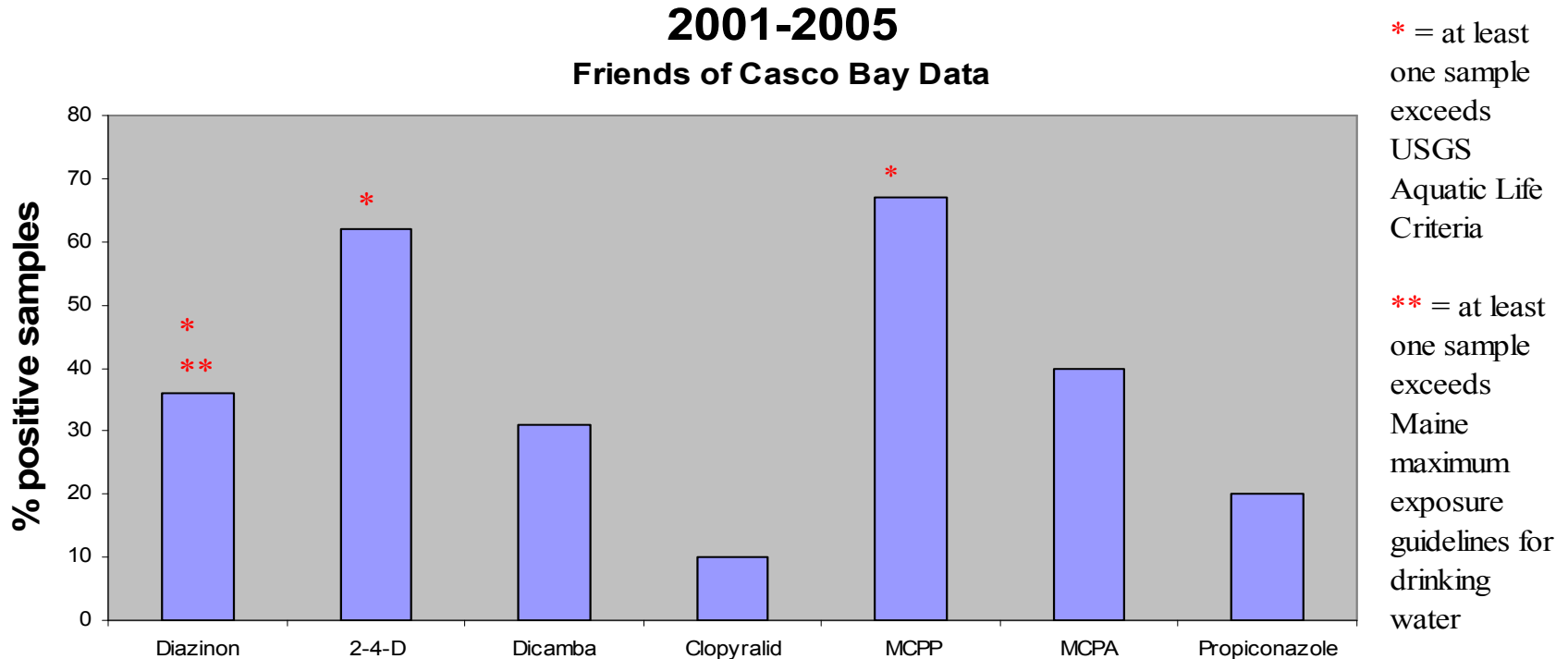
Lawn Pesticide Use Tripled: 2001-2004

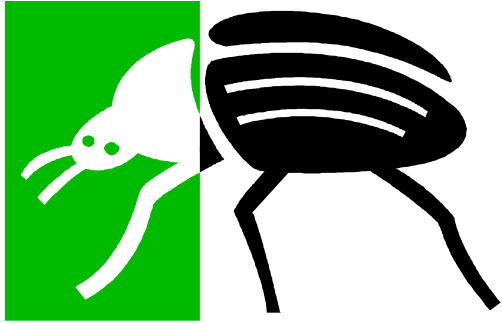




More IPM is Needed

Lawn Pesticides Found in Portland Area Streams

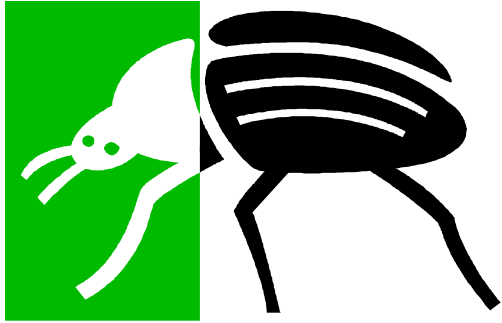




More IPM Adoption in Maine is Needed

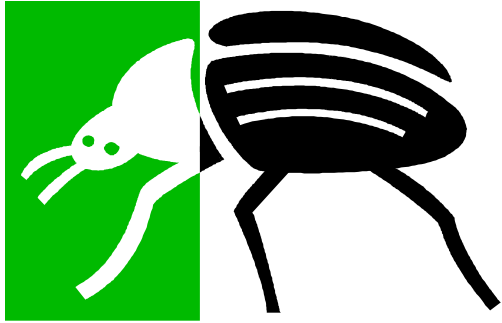
Immediate and Long-term Benefits:

- **Protect human health**
 - Improved indoor air quality
 - Reduced sick days
 - Improved productivity
- **Save money**
 - Reduced property maintenance costs
 - Fewer facilities repair emergencies
 - Fewer pest control emergencies
- **Protect environment**



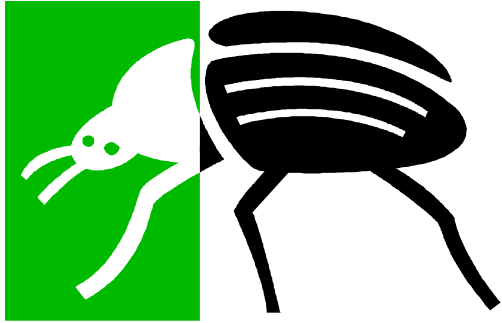
Part II

IPM and BGS: Developing an
Integrated Pest Management Policy for
State Owned and Managed Office
Buildings and Their Grounds



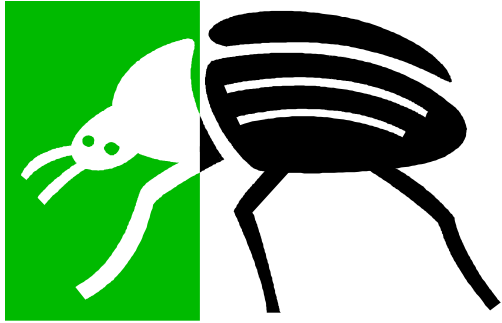
What Does the EO Ask BGS to Do?

- Develop a statewide IPM policy for all BGS owned and managed office buildings and grounds
- Develop contract specifications that require contractors to utilize IPM best practices in their treatment methods
- Seek input and guidance from the Board of Pesticide Control, the IPM Council and the Governor's Task Force on Safer Chemicals



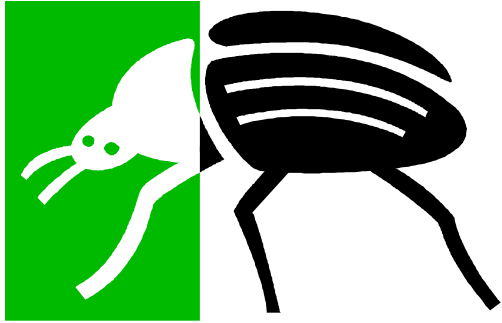
Who are the Key Stakeholders?

- BGS
- Board of Pesticide Control
- IPM Council
- Governor's Task Force on Safer Chemicals
- Department of Agriculture
- The University of Maine Cooperative Extension
- IPM Contractors
- Building Coordinators
- State Employees
- The Public



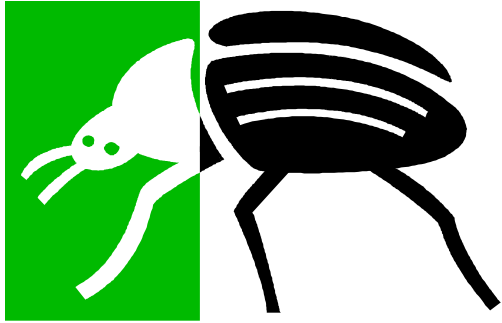
Where is the IPM Policy Now?

- Currently in its final stages of development
(See draft handout)
- Has been created out of consensus
between BGS, the IPM council and the
Board of Pesticide Control



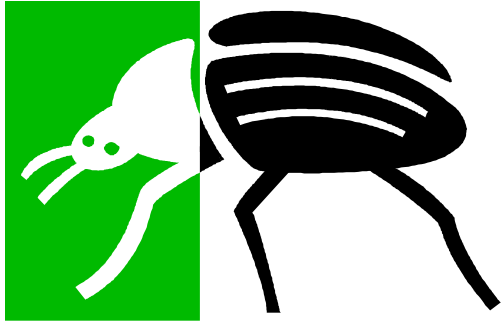
Implementing the IPM Policy

- Implementation will be incremental beginning with only those buildings owned and managed by PMD.
- Allows for the policy, contract specifications and contractors to evaluate the use of IPM practices and make necessary adjustments that may or may not be needed for improvement



Implementing the IPM Policy

- Once successfully implemented the IPM policy can act as a framework for other state agencies and the public.

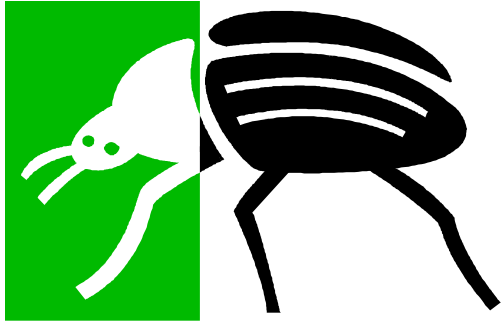


What We Can Learn From Others

US General Services Administration: mandated to implement IPM in all Capitol-area GSA-managed, leased and owned buildings.

Results (Greene & Breisch J. Econ. Entomol. 2002)

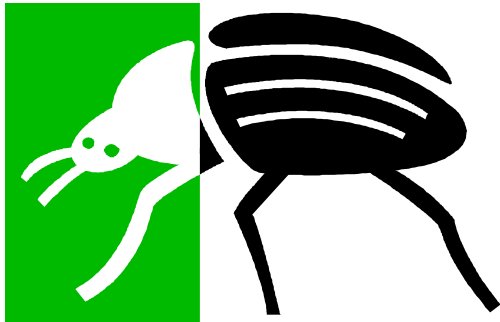
- 95% decrease in pesticide use
- 100% reduction in pesticide sprays (down from 2,661/yr)
- 15x increase in non-chemical pest control devices
- 89% fewer pest control requests



What We Can Learn From Others

Massachusetts: Executive Order #403 (1998) mandates IPM in all state-owned buildings.

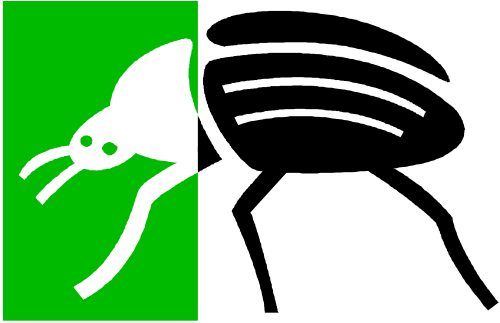
- Detailed 'Request for Response' developed for IPM service contracts.
- Contractors pre-qualified upon acceptance of written IPM plan and participation in building inspection.
- Minimal oversight due to lack of compliance staff for on-site inspections or review of contractors' submitted service records
- Haven't gone out to bid since 2001 due to lack of staff time to administer RFR, pre-qualification, and contract processes



What We Can Learn from Others

Connecticut: state-controlled facilities required to use IPM if model pest control plans are available and pertinent to the facility.

- Environmental Protection agency (DEP) developed model plans and contracts for general pests, rodents, ornamentals/turf
- DEP directed to offer program to promote IPM to general public and on private properties.
- DEP must review sampling of state agency IPM plans and may review pesticide applications to evaluate compliance.



BGS Suggestions for Moving Forward