

Facilities, Parks, and Golf Courses



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A dream into a reality



A vision is just a pipe dream without the support of others to make it a reality.

The program's success is due to a collective effort.

Outdoor Strategy

August 2004

- ❖ Reduced treatment of rats around building exteriors and dumpsters.
- ❖ Allow all rodents to co-exist with people and other animals.

For 250 acres of landscape

2004 GSA Outdoor Plan Common Pests

Insects



Rodents



Weeds



The Beginning

March 2005

- Ventura County Board of Supervisors requested that departments reduce the use of anticoagulants to the fullest extent possible.
- GSA eliminated the use of anticoagulant for 2.5 million square-feet (58 acres) of building space.
- GSA developed an Interior IPM Plan.



Common Pests

Insects



Rodents



Interior IPM Plan

- Toxic pesticides replaced
 - Anticoagulants
 - EPA Category I and II
 - Organic Materials Review Institute (OMRI).
- Alternate methods of treatment: cultural, biological, mechanical and physical.

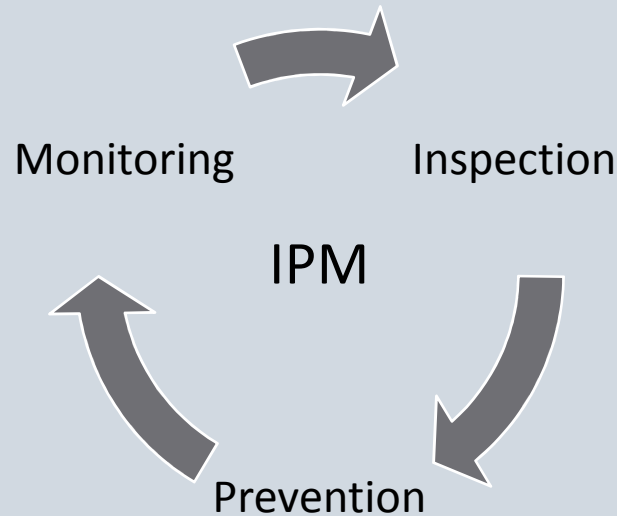


Interior IPM Plan

- Practicing good housekeeping to eliminate food and water source.
- Keeping exterior doors and windows closed when not in use.
- Eliminating access of pest to facilities and conduct routine structural assessments.
- Determined the pests travel patterns and find their home-base.

Interior IPM Plan

Monitoring the pests activity and adjusting methods over time from broadcast to localized spots where pests are concentrated.



Cultural Shifts

IPM Plan Implementation



- Distributed the IPM Plan to employees, vendors, custodial and maintenance departments.
- Employee campaign “If you feed them they will come”.
 - Posted the plan.
 - Created a promotional video.
 - Reviewed plan with employees.

IPM Plan Implementation

Collective effort:

- Maintenance Div. inspected building access and made structural improvements.
- Custodial and vendor staff monitored traps and posted signs to keep areas free of food and standing water.
- Security Div. monitors traps and posted signs.
- Modified pest management contracts to prohibit use of high toxicity and anticoagulants and to provide monthly reports.

IPM Plan Implementation

- Modified solid waste contracts to require vendor to:
 - remove debris
 - keep bins and areas clean
 - cut off entry points
 - cover lids after dumping
- Construction and project groups consider and use IPM when selecting landscape design and plant type.
- Landscape Div. cleared heavy landscape growth areas near the buildings, trim trees to eliminate contact with roofs.



Government Center Hall of Administration

Relocated the trash outside and used the trash compactor for recycled material disposal.



Alternate Methods and Less Toxic Pesticides

Originally we were using anticoagulants

- ☐ First Generation

- ☐ d-CON

- ☐ Warfarin

- ☐ Second Generation

- ☐ Contrac blox

Note: 1st generation rodenticides require multiple feeding

We tried.... Fumitoxins both a fumigant and an oral pesticide

Aluminum phosphate reacts with liquid to release toxic phosphine fumes and is harmful to humans.



We tried...Non Chemical Controls – sticky traps

Cheap and easy to move. Death is not always immediate.



We are using...

More encompassing, but location of the dead rodent is not as critical. They are:

- ☐ ZP (zinc phosphide) Rodent Ag Bait, EPA # 12455-17
- ☐ ZP (zinc phosphide) Oat Bait 12455-102 pellets applied in gopher hole.
- ☐ Macabee Gopher Traps bait free
- ☐ Trapline Mole Traps bait free



Findings

Over treating

Unnecessarily using pesticides with high toxicity

The new method is less expensive



Cost

Product	Cost per Pound
Contrac blox	7
Fumitoxin	18
ZP Rodent Ag Bait, EPA # 12455-17	2
ZP Oat Bait 12455-102	2.60

Outcome

Note: 10.9 million square-feet exterior
2.5 million square-feet interior

Key Performance Indicator (KPI) to monitor consumption

- No use of anticoagulants
- No use of EPA Category I and II
- 50% reduction in exterior rodenticides
 - 2008-2012 no pesticides were applied
 - 2013-2015 used 84 pounds (average pounds 28 annually over 250 acres of landscape)
- 15% reduction in interior rodenticides
- 86% reduction overall



No secondary effects

ZP Rodent Bait is an acute, pelleted rodenticide that kills rats, mice, and pocket gophers within hours. It provides fast economical cleanout of infested areas. Just teaspoon amounts of ZP, equal in effectiveness to 4 ozs. of anticoagulant bait, control in one feeding. Its active ingredient, zinc phosphide, is mixed throughout this pelleted bait for maximum acceptance. Food grade cereals and enhancers add to the bait's taste and stability. When ingested, ZP comes in contact with dilute acids in the stomach, releasing toxic phosphine gas. ZP is not stored in muscle or other tissue of poisoned animals; there is no true secondary poisoning of your pets. Its odor is not offensive to rodents but does discourage non-target animals.

County Strategy

June 2007

Drafted the IPM Strategy which set forth guidelines for all facilities.



June 2007 Formed IPM Committee

- Share ideas and knowledge
- Create commonality among departments
- Networking
- Demonstrate products and methods



Members

GSA (chair)

Airports

Harbors

Health Care Agency

Human Services

Public Works

Sheriff

Supervisor Linda Parks' Office

Supervisor Steve Bennetts' Office

Harbor

Hydrex/O'Connor

Rincon Vitova

Kastle Kare

Guests:

Trustee, Ventura County School Board

Ag Commissioner

Univar, Chemical Distributor



Shared IPM Info With:

City of Oxnard

City of Ventura

City of Ojai

City of Simi Valley

City of Camarillo

City of Port Hueneme

City of Moorpark

City of Santa Paula

City of Thousand Oaks

City of Fillmore



Gas explosions for gopher control measure

Too loud



Department of Airports Does Not Use Anticoagulants

- ☐ Were using Anticoagulants and Fumitoxins.
- ☐ Currently, they do not treat rodents at all.

Parks Department Does Not Use Anticoagulants

Manage 912.5 acres of developed facilities and park land

- EPA approved chemical pesticides
- Owl boxes



Owl Boxes

The County currently has owl boxes at Santa Rosa and Soule regional parks and plans to add them to other parks.

- Benefits:
 - Organic rodent control
- Drawbacks:
 - None



Outcome

Reduction in harmful pesticides

Countywide Tiered Materials List

Countywide Pest Resistant Plant List

Internet Website

Construction Design Standards



County Pesticide Key Performance Indicator (KPI)

Focus Area #4 - Sustainability,
Natural Resource & Infrastructure Support
FY 2013-2017



Challenges

Changing the culture

- Staff mindset
- Knowledge base

Training service employees

- (260 service employees)

Continuity due to staff changes

Contract oversight



Why was it a success?

Executive Support
Technical Support
Financial Support
Employee support



When willing minds and hearts come together change happens no matter how small it makes a difference.