

IPM CURRICULUM FOR AREA OPERATIONS SUPERVISORS

LOW-RISK INTEGRATED PEST MANAGEMENT TRAINING

William and Jean Currie, International IPM Institute

INSTRUCTION UNITS IN THIS LESSON PLAN:

1. The IPM policy, what it does, what not to do, your role in policy implementation, how to activate pest management help, expectations from Pest Management Technicians.
2. Identify what pests are.
3. The needs of pests.
4. Pest exclusion from site.
5. What pests are in the landscape and exterior of structures?
6. Inspection and monitoring, observation and reporting.
7. Who's responsible for pest prevention?
8. Training objectives.

PERFORMANCE OBJECTIVES:

Unit #	Objective of Performance	Importance	Learning Difficulty
1	Know the IPM policy, understand roles in policy implementation and know how to get help in solving pest problems.	Very Important	Moderate
2	Know what a pest is and why it is considered a pest in sites.	Important	Easy
3	Understand the importance of the needs of pests and how we provide them with those needs – air, water, food, shelter, temperature, light (plants).	Important	Moderate
4	Know how pests get into structures. Know how to keep them out.	Important	Easy
5	Know exterior and landscape pests. Why are they there? How do we prevent their presence?	Important	Difficult
6	Know how to inspect and monitor for various pest problems. How to keep data.	Important	Moderate to Difficult
7	Determine who has responsibility to prevent pest presence on sites. Know how to make it happen.	Important	Difficult
8	Know how to influence and train people to accomplish results.	Very Important	Difficult

KEY:

IMPORTANCE: Very important, important, not too important

OBJECTIVE OF PERFORMANCE: Must know, be familiar, have knowledge, understand, perform, demonstrate, etc.

LEARNING DIFFICULTY: Difficult, Moderate, Easy, Moderate to Very Difficult

AREA OPERATIONS SUPERVISOR LESSON PLAN

PREPARATION DATE: May 9, 2008

PREPARED BY: William E. Currie

UNIT OF INSTRUCTION: Low-risk IPM Policy Implementation

TITLE OF LESSON: Policy, what is a pest, pest needs, pest entry, outside pests

INSTRUCTIONAL OBJECTIVE: Know the low-risk IPM policy, their role in implementation, and how to get pest management help. Know what a pest is and why, and what their needs are. Know how they get into structures, how to keep them out, and know outside pests and how to prevent their presence.

TIME ALLOTTED FOR LESSON: 3 hours

METHOD OF INSTRUCTION: Lecture, guided discussion, demonstration

INSTRUCTIONAL RESOURCES: Manual, slides, flip chart

A/V EQUIPMENT: Flip chart, PPT, slide projector, overhead projector, screen

GENERAL PLAN OF PRESENTATION: Introductions – our role – their charge. Why an IPM Policy? What it does, prohibited activities, their roles in implementation, how to get pest management help, expectations. What is a pest? Pest needs – pest entry into structures and how to keep them out. Outside pests – why are they there and how to prevent their presence.

INTRODUCTION: Names and roles of instructors, student introductions. Why are we here? Why an IPM policy? IPM defined – what to do – precautionary principle. Approved list of products, notification, posting, emergency approval, training. Don'ts: Licensed Pest Management Technicians only apply pesticides, no ban, phase out, roles. Sanitation: No food, pest-proof food storage, eliminate clutter, observation and reporting. Teach others, expectations of Pest Management Technicians.

EXPLANATION/APPLICATION/PRESENTATION:

1. What is a pest? Why are they considered pests? How important are they? Pests need air, water, food, shelter, temperature, light. We provide their needs because we design our shelters and landscapes to meet our needs (which are the same as theirs).
2. How do pests enter structures? Doors, windows, vents, pipes, cracks and crevices, deliveries, personnel, etc. How do we keep pests out? Close doors, install door sweeps, screens, caulks, repairs, etc. How can we encourage innovative approaches for preventing pests?
3. What are common exterior and landscape pests? Birds, weeds, insects, rodents, cats, fleas, termites, etc. Why are they there? Food, water, shelter. How can we discourage them or keep them out of sites? Exclusion, sanitation, habitat modification. Healthy landscape plants and turf.

CONCLUSIONS/SUMMARY: Low-risk pest management requires dedication and may be tedious and time-consuming when performed correctly. A thorough understanding of why such procedures are so important frequently imparts a degree of significance to even the most mundane task. Pests live where conditions favor them. Good pest management practices prevent pest presence by eliminating pest access to their needs.

HOMEWORK ASSIGNMENT:

1. Read Manual.
2. Describe your role in the Policy implementation.
3. List evidence and sighting of pests.
4. Observe good preventive measures and report on them.
5. List pest evidence found outside.

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT ONE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: Policy, Roles, How to Activate Pest Management Help
 UNIT OF INSTRUCTION: Unit 1: Lecture, PPT or Overhead Transparencies – 45 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	Policy, history, implementation	Lecture	Easy
2	What's different, IPM definition, do's, precautionary principle, approved product list, notification, posting, emergency approval, training	Lecture	Moderate
3	Don'ts, only licensed Pest Management Technicians apply pesticides, remove harborage (clutter), no BAN, phase out pesticides over time	Lecture	Difficult
4	Roles, sanitation, no food, pest-proof food storage, eliminate clutter, observation and reporting, teach others	Lecture	Moderate
5	Reportable conditions, pest sighting, pest evidence, droppings, gnawings, webbing, fecal focal points, scattered trash, etc.	Lecture, Display, Q&A	Difficult
6	Facilities Manager, point of contact, may examine situation, call to report, information directed to appropriate office	Lecture	Easy
7	Expectations, Pest Management Technicians respond, emergencies that day, thorough inspection and monitoring	Lecture, Demo (monitors, traps)	Easy
8	Low-risk pesticide application, follow-up, repair structural defects, prevent pest access	Lecture	Easy
9	Basics of IPM: exclusion, sanitation, habitat modification, inspection, monitoring, low-risk pesticides, records	Lecture	Difficult

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT TWO

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation
SUBJECT MATTER: What are pests and why are they here?
UNIT OF INSTRUCTION: Unit 2: PPT, Slides, Lecture, Guided Discussion – 30 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	What is a pest? List all mentioned.	Guided Discussion, Record on Flip Chart.	Easy
2	Why are these critters considered pests? Ugly, aesthetics, damage, health and safety.	Guided Discussion, Lecture	Moderate
3	How important are they?	Guided Discussion	Easy

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT THREE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
SUBJECT MATTER: Pest Needs
UNIT OF INSTRUCTION: Unit 3: Lecture, Guided Discussion – 30 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	What do pests need? Air, water, food, shelter, temperature, light (plants).	Guided Discussion	Easy
2	How do we provide for their needs? Structures and landscapes designed for people – same needs.	Guided Discussion	Easy

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT FOUR

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation
SUBJECT MATTER: Pest Entry and Exclusion
UNIT OF INSTRUCTION: Unit 4: Lecture, Guided Discussion, Demonstration – 45 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	How do pests enter structures? Doors, windows, vents, pipes, cracks and crevices, deliveries, personnel.	Lecture, PPT, Guided Discussion	Easy
2	How do we keep them out? Quarantine, repairs, door sweeps, close doors, screens, caulks.	Lecture, Guided Discussion, Demonstration	Moderate
3	How can we encourage innovative approaches for preventing pests?	Guided Discussion	Easy

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT FIVE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
SUBJECT MATTER: Exterior and Landscape Pests
UNIT OF INSTRUCTION: Unit 5: Lecture, Guided Discussion, PPT – 30 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	What are common exterior and landscape pests? Birds, weeds, insects, rodents, cats, fleas, termites, etc.	Guided Discussion, List on Flip Chart	Easy
2	Why are they there? Food, water, shelter.	Guided Discussion	Easy
3	How can we discourage or keep them out of sites?	Guided Discussion	Moderate
4	HOMEWORK ASSIGNMENT: 1. Read Manual. 2. Describe your role in the Policy implementation. 3. List evidence and sighting of pests. 4. Observe good preventive measures and report on them. 5. List pest evidence found outside.		

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

AREA OPERATIONS SUPERVISOR LESSON PLAN

PREPARATION DATE: May 9, 2008

PREPARED BY: William E. Currie

UNIT OF INSTRUCTION: Low-risk IPM Policy Implementation

TITLE OF LESSON: Inspection and Monitoring, Responsibilities, Training and Influence

INSTRUCTIONAL OBJECTIVE: Know how to perform inspection and monitoring, what it tells you, and data collection. Know who is responsible for pest prevention. The IPM process, training and influencing others.

TIME ALLOTTED FOR LESSON: 3 hours
METHOD OF INSTRUCTION: Lecture, guided discussion, demonstration
INSTRUCTIONAL RESOURCES: Manual, slides, flip chart, inspection chart
A/V EQUIPMENT: Flip chart, PPT, slide projector, overhead projector, screen

GENERAL PLAN OF PRESENTATION: Review homework. How to conduct an inspection and why (hands-on). How to monitor for pests, data collection, who is responsible for pest prevention? Incentives? Disincentives? How to make it happen, the IPM process, instructional objectives, must know information, behavior change, incentives and recognition, guided discussion, show and tell, demonstration.

INTRODUCTION: Homework discussion, Manual, roles, pest evidence or sightings, good preventive measures.

EXPLANATION/APPLICATION/PRESENTATION:

Inspection – a snapshot in time. What to look for (and see) – think like a pest. See site from an ant's perspective (or other pest) – think small.

Exclusion – sanitation – habitat modification – water – food – shelter.

Monitoring – what pests are doing when no one is there. Provides information over time.

Tells us where pests may be – how many there are and how extensive their habitat extends. Is the population expanding or declining?

Who has responsibility to prevent pests? Maintenance, Operations, Facility Manager, Cafeteria Manager, Gardener, Custodian, Pest Management Technician?

What incentives are provided? What are the disincentives? What can be done to make it happen?

The IPM process:

1. Roles of occupants, pest managers, decision makers
2. Pest management objectives
3. Action thresholds
4. Inspection and monitoring
5. Modify the habitat – exclusion – sanitation
6. Low-risk management actions
7. Evaluate results
8. Keep written records

Train the Trainers: Instructional objectives – change behavior from reactive to preventive – provide must-know information first – then good to know – nice to know – background. Change behavior – perfect practice makes perfect – success makes more success – attitude changes after behavior changes – change is easier with incentives and recognition – recognize any movement toward the ideal behavior. Use “guided discussion” – gets class input and “buy in” – use “show and tell” to illustrate technique – demonstrate – then coach “hands-on performance” by trainees to build proficiency and comfort levels with skill.

CONCLUSIONS/SUMMARY: Low-risk pest management requires dedication and may be tedious and time-consuming when performed correctly. A thorough understanding of why such procedures are so important frequently imparts a degree of significance to even the most mundane task. Charge: teach IPM to others.

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT SIX

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation
SUBJECT MATTER: Inspection and Monitoring
UNIT OF INSTRUCTION: Unit 6: Lecture, Demonstration – 1 hour

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	Review homework.	Guided Discussion	Easy
2	How to conduct an inspection and why.	Lecture, Demonstration, Guided Discussion	Moderate
3	How to monitor for pests. What it will tell you.	Lecture, Demonstration, Guided Discussion	Moderate
4	What data should you get from inspection and monitoring?	Lecture, Demonstration, Guided Discussion	Difficult

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT SEVEN

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
SUBJECT MATTER: Who is Responsible?
UNIT OF INSTRUCTION: Unit 7: Lecture, Guided Discussion – 30 minutes

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	Determine who has the responsibility to prevent pests on campus – maintenance, operations, plant managers, gardener, custodian?	Guided Discussion	Difficult
2	What are the incentives to meet this responsibility?	Guided Discussion	Difficult
3	What are the disincentives?	Guided Discussion	Difficult
4	What can we do to make it happen?	Lecture, Guided Discussion	Moderate

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

AREA OPERATIONS SUPERVISOR LESSON PLAN UNIT EIGHT

COURSE DESCRIPTION: Low-risk Integrated Pest Management Implementation
 SUBJECT MATTER: Training and Influence
 UNIT OF INSTRUCTION: Unit 8: Lecture, Guided Discussion, Demonstration – 1.5 hours

INSTRUCTIONAL PROCEDURE:

No.	Instructional Sequence (Tasks)	Instruction Method (Performance)	Learning Difficulty
1	IPM process – 8 steps to success.	Lecture, Guided Discussion, PPT	Moderate
2	Instructional objectives – change behavior from reactive to preventive.	Lecture	Difficult
3	“Must know” information first – then good to know – nice to know – background information.	Lecture	Moderate
4	Change behavior – perfect practice makes perfect – success makes more success – attitude changes alter behavior.	Lecture, Demonstration	Moderate
5	Change easier with incentives and recognition – recognize any movement toward the ideal behavior.	Lecture, Demonstration	Easy
6	Use guided discussion – gets class input and “buy in.”	Guided Discussion	Easy
7	Use “show and tell” to illustrate techniques.	Demonstration	Moderate
8	Demonstrate – then coach “hands-on performance” by trainees to build proficiency and comfort levels with skill.	Demonstration	Difficult
9	Charge – teach IPM to others.		

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion