



Landa Park Golf Course Integrated Pest Management Plan

Summary and Presentation

August 14, 2013

Key Points of Emphasis

- Purpose of an IPMP
- Overview of Best Management Practices
- Renovations and Updates

Purpose of IPMP

Integrated Pest Management Definition

“Integrated pest management is a **continuous system** by which pests (weeds, diseases, insects or others) are identified, action thresholds are considered, all possible control options are evaluated and control(s) are implemented.

Control options – which include biological, chemical, cultural, manual and mechanical methods – are used to **prevent** or remedy unacceptable pest activity or damage. Choice of control option(s) is based on effectiveness, environmental impact, site characteristics, worker/public health and safety, and economics.”

“The goal of an IPM system is to manage pests and the environment to balance benefits of control, environmental quality, costs, public health and site specific requirements. IPM takes advantage of all appropriate pest management options.”

- as defined by the Golf Course Superintendents Association of America

Objectives of IPMP

- Minimize potential hazards to human and environmental components
- Providing optimal course playing conditions
- Minimize the amount of chemical applications and optimize application efficacy

Objectives of IPMP

- Enhance communication regarding agronomic and pest management practices
- Provide site specific planning
- Access to information on pest biology, control, agronomic guidelines, and monitoring tools and references

Area Definition

Turf-grass Areas:

Area	Total Acreage	Fertilizer Requirement	Irrigation Requirement	Mowing Frequency	Cultural Frequency
Greens	2.5	High	High	High	High
Tee Surface	3	Medium	Medium	Medium	Low
Fairway	21	Medium	Medium	Medium	Low
Rough	60	Low	Low - N/A	Low	Low
Native	18	N/A	N/A	N/A	N/A

Greens surfaces are the highest priority playing surface and require the greatest amount of cultural and chemical inputs, however, make up less than 3% of the course.

Best Management Practices

- Preventative approach tends to reduce the amount of chemicals applied and the risk of problems
- Buffer zones adjacent to waterways that receive no fertilizer or pesticide applications
- Proper application of chemicals
- Cultural and mechanical management to reduce pest susceptibility
- Irrigation management and conservation to ensure a healthy ecosystem

Additional Practices

- Dispersible Granule fertilizer utilization on greens complexes



- Buffer Strips and Riparian Zones bordering waterways



- Consider all potential influential environmental factors, such as weather, to reduce environmental risk when planning applications
- Using lower a.i. chemistries and application rates (i.e. fire ant control methods, preventative rates of fungicides, herbicides)



Renovation Improvements

- Increased runoff capture within the course boundaries
- Bio-swale installation and improvements where water run-off is anticipated
- Improved and increased riparian and buffer strips adjacent to waterways
- Improved irrigation design and capabilities throughout the course
- Fertigation capabilities which allows for slow steady fertilization instead of larger nutrient loads introduced all at once.
- Improved turf-grass species and cultivars

Questions

