



# Batavia Park District Ballfield Maintenance Manual

## Batavia Youth Baseball



View online

### 1. Overview

Proper field maintenance ensures a safe, consistent, and high-quality playing surface. This manual outlines the tools, techniques, and procedures required to maintain ballfields under varying conditions. Consistency, attention to detail, and proper assessment of field conditions are critical to effective maintenance.

### 2. Required Tools and Equipment

The following tools are essential for maintaining ballfields:

- **Field Maintenance Machine with Grooming Attachment**  
Used for grading and maintaining a level playing surface.
- **Drag Mats**
  - *Broom-style / Finishing mats*: Ideal for dry conditions
  - *Cocoa mats*: Best for wet conditions
  - *Nail drags*: Used only for opening overly wet fields or regrading (½–1 inch depth)
- **Tamper**  
Used to compact material when filling in holes or low spots
- **Tape Measure and Nails**  
For verifying base placement and mound distances.
- **Hard Rake**  
Raking certain areas by hand can be more effective than dragging or grading (batter's box, pitcher's mound)
- **Shovels (Flat Tip, Scoop, Sift)**  
For moving infield mix and removing debris.
- **Water Source (Hose or Watering Can)**  
For filling in low areas like batter's box, pitcher's mound, and around bases where players slide.
- **Field Drying Agent**  
Used to manage moisture in high-use or saturated areas. Apply conservatively DO NOT USE TOO MUCH.
- **Push Broom**  
Useful for smoothing surfaces and minimizing disruption in dry conditions. Can be used to cover up tracks and clean out dugouts as well.
- **Stirrup Hoe**  
Effective for edge work in hard-to-reach places and weed control. Great alternative to chemicals.

### 3. Field Drag Procedures

Field dragging techniques vary depending on moisture conditions. Proper evaluation of the field should always be completed before beginning maintenance.

#### Dry Field Procedures

Dry conditions require water management and minimal surface disruption. We want to have some moisture in our ball mix at all times if possible.

#### Low Area Repair

- Identify worn areas (batter's box, pitcher's mound, base paths, catcher/umpire zones).
- Loosen material with a hard rake.
- Pull mix toward the center of the low areas.
- Apply water before tamping to ensure proper compaction.
- Do not attempt repairs without water.

#### Dragging Technique

- Use a finishing mat or broom-style mat to create the least amount of dust and mix break up
- Avoid excessive dragging or grading to prevent surface breakdown and dust.

#### Operating Speed

- Maintain a slow, steady pace (walking speed) for consistent results.

#### Edge Control

- Keep equipment approximately one foot from field edges to prevent lip buildup.
- Use a rake or broom to pull displaced material back toward the infield.

#### Wet Field Procedures

Wet conditions are ideal for maintenance when managed properly. Don't be afraid to let the field sit and dry for a while; it can save some extra work and drying agent.

#### Field Assessment

- Walk the field to identify soft or unstable areas.
- Avoid using machinery in areas where sinking occurs.

#### Soft Spot Repair

- Rake surrounding material by hand into the wet area.
- Apply and thoroughly incorporate drying agent.

#### Drying Agent Guidelines

- Do not overapply.
- If more than 4–5 bags are required, allow additional drying time instead (an entire day may be needed).

#### Nail Dragging

- Set depth to ½–1 inch.
- Operate slowly to ensure smooth penetration.
- Allow the surface to dry slightly before finish dragging.

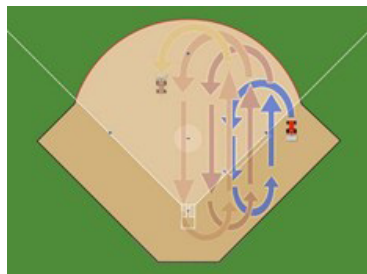
#### Grading and Grooming

- Use grading equipment (machine plow and grader) only when necessary to correct uneven surfaces.
- Regular maintenance reduces the need for frequent grading.

#### Finish Dragging

- Use a steel finishing mat or broom-style mat.
- Ensure the surface is dry enough to prevent clumping.

Image 1: Common drag patterns



Overlapping ovals

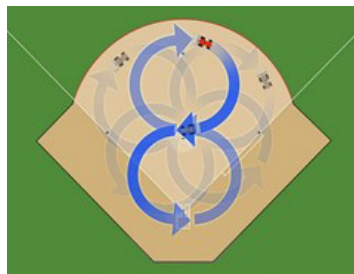
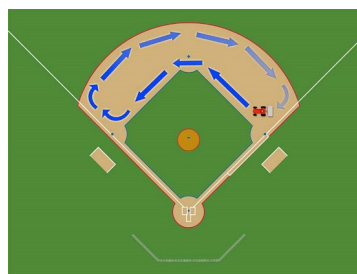
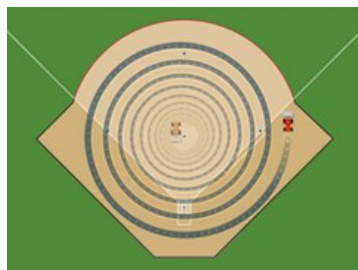


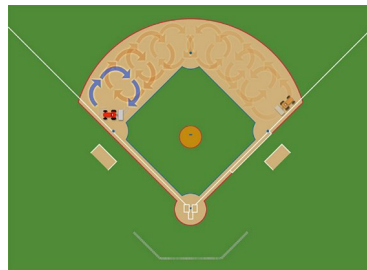
Figure 8's



Parallel to edges



Inward circle



Overlapping small circles

#### 4. Drag Patterns and Field Consistency

- Proper drag patterns are essential for maintaining a level and consistent surface.
- Rotate drag patterns regularly to prevent uneven buildup.
- Vary starting and stopping points.
- Do not overlap between infield and outfield edges, as this causes lip buildup.
- For narrow areas where machinery cannot pass:
  - Perform maintenance by hand using a rake, broom, or small mat.
- Always move material toward the infield.

#### 5. Key Maintenance Principles

- Consistency is critical — frequent, light maintenance is better than infrequent heavy repair.
- Moisture control is essential — neither overly dry nor overly wet conditions are ideal.
- Less is more — excessive dragging, grading, or drying agent use can damage the field.
- Attention to high-wear areas prevents long-term damage.
- Proper technique extends field life and improves playability.

#### 6. Safety and Best Practices

- Always assess field conditions before using equipment.
- Operate machinery at safe, controlled speeds.
- Avoid working on unsafe or overly saturated surfaces.
- Store tools and materials properly after use.
- Communicate with staff to ensure consistent maintenance practices.

#### 7. Lip Reduction and Edge Maintenance

Lip buildup along the edges of the infield is a common issue throughout the season and should be addressed proactively. Regular maintenance is essential to prevent excessive accumulation and preserve proper field drainage.

##### Routine Maintenance

- Inspect field edges frequently and address buildup early.
- Use a hand rake, leaf blower, or water (hydro washing) to remove excess infield mix from the grass line.
- Avoid allowing material to accumulate to the point where major remediation is required.

##### Proper Field Edge Structure

- Maintain a slight crown in the infield surface to promote proper drainage away from the center of play.
- Ensure that infield mix does not migrate into the outfield grass, as this contributes directly to lip formation.

##### Edging Practices

- Regularly edge along the grass line to define a clean and consistent boundary.
- Use maintenance tools to move displaced material back toward the infield surface.

##### Ongoing Edge Control

- Once a clean edge is established, maintain it consistently to prevent future buildup.
- **Use a stirrup hoe to:**
  - Keep the edge line clean and well-defined
  - Remove weeds along the boundary
  - Maintain a sharp transition between grass and infield