



# **Table of Contents**

## **Section 1:**

### **Baseball and Softball Field Maintenance**

- A. Determining Field Playability**
- B. Water Removal Techniques For Skinned Infields**
- C. Addition of Field Drying Agents**
- D. Infield Grooming Techniques**
- E. Skinned Infield Leveling**
- F. Clay Repairs**
- G. Grass Edge Maintenance**
- H. Field Lining Techniques**



## Executive Summary

Please share this report with your assistants as many others work on our Village fields. It is helpful if we ALL do our part. There is no grounds crew here in Ridgewood. It's on us.

### What's the most important thing you can do?

- Do NOT displace water and/or clay from the infield onto any part of the grass. This creates unwanted humps and/or kills the grass.
- Scarify the clay infield with garden rake or metal drag. Do not overlay the drag onto the grass.
- Rake the baselines from home to the base. When raking the base paths, do not rake across the path. Rake up and down along the length of the path. This will prevent clay build up along the edge.
- Replace any loosened clay at the pitcher's mound & batter's box – water and tamp.
- Make sure no one digs holes in the outfield grass. Ankles will sprain.
- DO keep the dugouts clean from garbage and do not allow anyone to throw or otherwise remove or displace the rocks from the dugout.
- DO water the clay infield before and after a practice or game. This will ensure proper safety condition of the playing surface.
- Drag the surface with provided rakes or cocoa mats to eliminate uneven playing surface but do not build any clay near the edge of the grass.
- Please don't allow anyone to throw objects such as lax balls or soccer balls against the outfield fences.
- Move the batting screens off the infield when practice is complete.

**FIELD CLOSURES?** Call 201-670-5565 after 2 pm, option 6, for a recording on current field closures.

## PLAY BALL

- The code for the new field maintenance box on Upper Hawes and Lower Citizens is "6-4-3" (Top to Bottom) and should be easy to remember. Please lock it when done so equipment is there when you need it next.

Unfortunately, the Parks and Recreation Department is thinly-staffed and cannot properly maintain the baseball fields which require constant attention. It's up to us parents & coaches to ensure the proper maintenance of the field and thus the safety of the children who will hopefully enjoy playing on this field for many years.

LOWER CITIZENS: Irrigation box is located in foul territory along the first base/right field outfield foul line, about 15 feet beyond first base. Use the irrigation box to access the valves for the Garden Hose (located behind home plate) and/or to turn on the clay heads. Please ensure they are tightly closed at conclusion. **10 to 20 minutes** is all that is needed before or after practice – this will maintain a nice playing surface for the next game or practice.

## Section 1

# Baseball and Softball Field Maintenance

## A. Determining Field Playability

The decision to play on fields that are too wet is the number one cause of damage to ball fields and the top reason for player injury. And often, techniques used to make a wet field “playable” cause additional damage. Making the tough call to postpone a game due to wet conditions is the best decision for player safety and to preserve season-long playability of the ball fields.



**If there's standing water on 5% of the infield, it's  
TOO WET for play!**





**If your shoe leaves an impression like these, it's TOO WET for play!**



## **B. Water Removal Techniques for Skinned Infields**

The most important mistake to avoid is the removal or movement of infield mix. A level field will drain better and have fewer puddles. Low spots or depressions catch and hold water EVERY TIME!



### **Use a pump to remove puddles.**

1. Dig a hole and place the field mix out of your way.
2. Let the water drain into the low spot you've created.
3. Use the pump to move the water into a bucket.
4. Empty the bucket outside of the playing field into a drain.
5. Replace the field mix into the hole and level with a rake.

## **DO NOT Use These Methods on Wet Fields!**

- **DO NOT** use brooms to disperse puddles.
- **DO NOT** sweep a puddle into the grass.
- **DO NOT** remove muddy infield mix from the field.

All of these unfortunate techniques move infield material and leave a depression or low spot that will hold water every time it rains.





**For small or shallow puddles, use a water absorbent pillow.**

1. Allow the absorbent material to soak up the water.
2. Have a bucket nearby to wring out the pillow or sponge.
3. Empty the bucket of water off the field of play into a drain.

**After the standing water has been removed, use a rake or nail drag to loosen the infield mix so it will dry more quickly. Allow time to air dry.**



## **C. Addition of Field Drying Agents**

Calcined and vitrified clay marketed under the brand names Turface, Pro's Choice, Diamond Pro, Rapid Dry, and Profile are the most common products used to assist with wet infield conditions. These products should be used judiciously for two reasons: they are an expense to the program and they change the properties of the infield mix when used abundantly.



**Never use more than 3 bags of drying agent to make a field playable!**

## **Steps for Applying a Drying Agent**

1. First remove as much water as possible using the pump or pillow method.
2. Use a spreader, shovel, or hand to evenly apply a thin layer of the drying agent.
3. The material may be lightly incorporated using a rake or left on top of the infield mix.

## D. Infield Grooming Techniques

1. Remove the bases and plug the base anchor sleeve before beginning any operations.
2. **Vary the dragging pattern every time the field is groomed.**
3. Scarify the field with a nail drag or needle tines.
4. Finish groom the field with a drag mat or broom. Go slowly!
5. When finished dragging, stop 5 to 6 feet before the edge of the skin and lift the drag. Shake any excess field mix off before exiting the field.
6. Exit the field in a different location each time to prevent build-up of infield mix in one location.
7. Hand rake out the pile left from the field drag.
8. Hand rake: base paths end-to-end, home plate, and the back radius of the infield.



- **DO NOT** pull the nail drag or mat into the grass for any reason.
- **DO NOT** take a nail drag or mat within 24" of the grass edge. Only hand rake edges to prevent lips from forming.
- **DO NOT** take a nail drag over home plate.
- **DO NOT** drive the nail drag or mat down base paths or around home plate on baseball diamonds with a grass infield.



## E. Skinned Infield Leveling

Baseball and Softball fields are designed with a specific slope to drain water from their surface. Underground drain pipes are virtually useless and rarely installed on ball fields. Keeping the infield slope correct will prevent puddling and therefore field closures. Players sliding, mechanical field groomers, and other factors contribute to un-level skinned infields. **A diligent approach to correcting high or low spots is the most important task of a field manager.**

**For small areas, use a leveling rake.**

1. Pull the material from a high spot and deposit it in a low area.
2. If the infield mix is dry, wet the leveled area and compact it with a tamper or the grooming machine tires. Otherwise, it will not stay in place.



**For medium sized areas, use the leveling attachment of the grooming tool.**

1. Remove the bases and plug the base anchor sleeve.
2. Loosen the field material with a nail drag or needle tines.
3. Make sure the leveler is NOT in the float position.
4. Make wide sweeping turns in several directions over the area that needs to be leveled.
5. If the infield mix is dry, water the area and compact it with the tires of the grooming machine. Otherwise, it will not stay in place.



**For large areas or storm wash-outs, a box blade attachment works best. This should be coordinated with the Parks Department or outside contractor.**



## F. Clay Repairs

Clay surfaces provide very solid, firm footing and better wear characteristics than regular infield mix for high wear areas like the pitching mound and batter's box. Making a clay repair is similar to making a repair with regular infield mix. The biggest difference with clay is that it must NOT be contaminated with any regular infield mix.

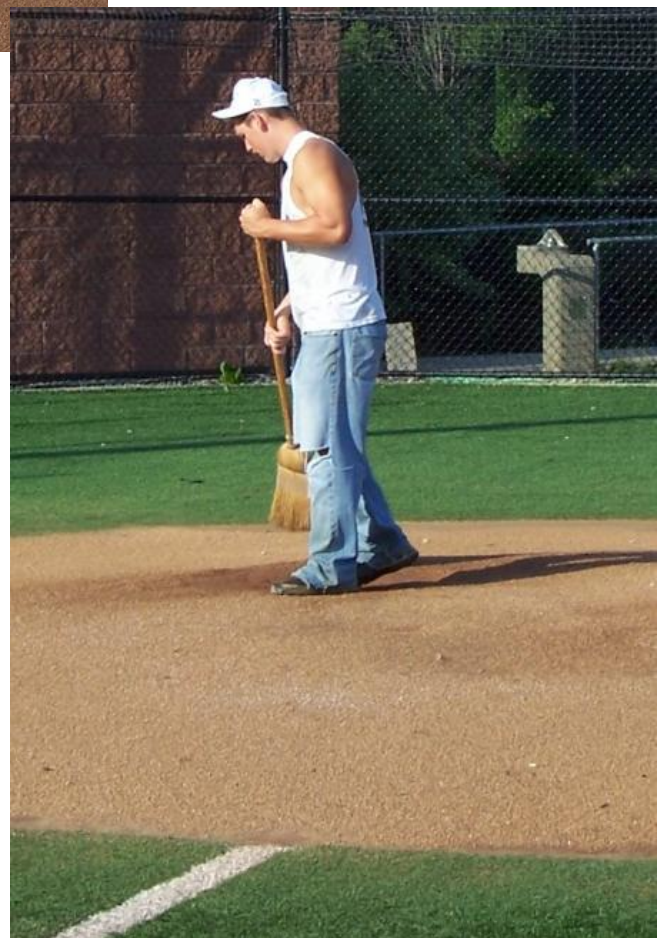


**Pitching mounds and batter's boxes should be repaired every time they are used.**

### Techniques for Clay Repairs

1. Dig out and discard all loose material including infield mix, clay chunks, and field conditioners in and around the area to be repaired.

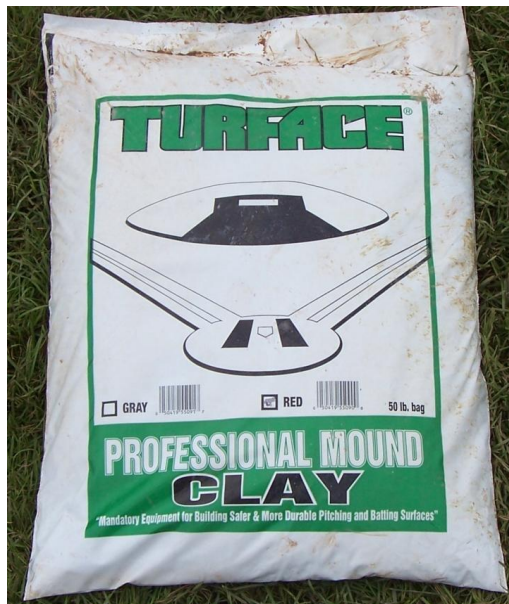
2. Sweep the area free of all minor bits of loose debris and place to the side.
3. Wet the existing clay with a flower watering can, hand held sprayer, or hose nozzle with a fine spray pattern.
4. Add new clay and compact in 2" layers. Working with clay can be tricky so follow these pointers:







- a. The new clay must have enough moisture content to stick to the underlying clay base that has been moistened. Otherwise, the new clay will pop out of place and create a hazard.
- b. If the clay is too sticky, wrap the tamper plate in a garbage bag to alleviate the problem. Shredded, bagged clay is very easy to work with and store. It is excellent for small daily repairs.
- c. Unfired clay bricks are great for large scale renovations and can be purchased by the pallet. Long term storage is not practical for bricks.
- d. Add approximately ½" of new field conditioner over the repaired clay area.



## **G. Grass Edge Maintenance**

Regular maintenance where the skinned infield meets the grass edge will prevent the formation of a lip. After wet playing conditions, the most common player injury occurs from bad ball bounces. Lips are a major contributor to this type of player injury. Lips at the grass edge are also the primary barrier to water exiting the skinned part of the field. Water trapped on the skin will force cancellations and field closures.



## **Techniques for Maintaining the Grass-to-Skin Edge**

- A manual or motorized edger can be used as frequently as preferred to keep edges looking crisp.
- Monthly edging is recommended.
- Neatly rake all grass clippings out of the infield mix when edging is complete.
- Sod should be purchased and installed if edges are significantly deteriorated.
- Sod installation should only be under taken in the early spring or fall. Sod will usually require hand watering for the first year.
- The Parks Department or an outside contractor should be contacted if sod installation is desired.





## Weekly Maintenance to Prevent Lips

- Use a backpack blower or power broom to push displaced material back into the skinned infield. This method works best when the infield mix is dry.



- Use a hose with a jet nozzle to wash the infield mix back to the skinned infield. Note that this method should only be performed when ample time is available for the skin to dry.

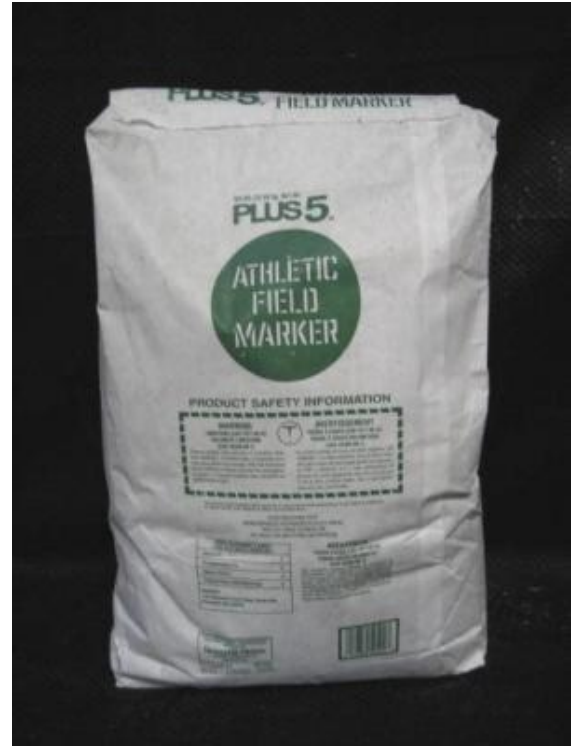
- Use a spring-tine leaf rake or broom and move the material back into the skinned infield. Use a leveling rake to distribute the material when edge maintenance is complete.





## H. Field Lining Techniques

- Only use “Athletic Field Marker” for foul lines and batter’s boxes on skinned infields. DO NOT substitute lime or other white materials because they may be less expensive.
- Only use marking paint that is specifically manufactured for turf.
- Always use a string as a guide line.



- Only use athletic field marker on skinned infields for important events. Overuse without removal will contaminate the infield mix and cause undesirable results.



- Remember, the entire infield foul line should be UNDER first and third base.

