



# A Featured ARTICLES

## Planning for Field Renovation

What you need to know to get started  
Ed Birch



Before you can develop a field renovation program, you need to get a handle on all the details: the number of sites, the number and type of fields at each site, and the condition of each field. Others will need access to the information

you gather and the program you develop, so set up a system to record the details. This could be a computerized spreadsheet, handwritten notes in a notebook or a combination of the two.

Visit each site and develop a site map for each property, showing the layout of each field. Assess the condition of each field and record the details: surface consistency, degree of slope, surface drainage, type of grasses, percentage of turf cover, analysis of the soil profile, soil depth, soil test sample results, inground drainage system details, irrigation system details and any other information pertinent to each field.



Diller High School field in the Broward County school system before renovation in 1984.

Meet with the individual in charge of each site and the person currently in charge of field maintenance. Introduce yourself and explain what you hope to accomplish. Get their feedback, including details on the existing maintenance program and the use of each field.

Start with the basics

Review the information that you have gathered and define your needs. Analyze the resources on hand in terms of equipment, tools, materials and personnel. Review the budget to determine what additional resources would be

available. Within those parameters, develop a routine maintenance and preventive maintenance program. Safety must be the first priority.

Develop a basic program of mowing, fertilization, aeration, irrigation and pest control. Set up the procedures for the work to be done. Establish professional standards for every member of your staff. Lead by example. Organize your staff, dividing areas of responsibility according to field needs and resources. Whatever your staff size, make site assignments to further build continuity. Keep detailed, up-to-date records on all aspects of field maintenance.

Open communication is key to success, so keep in touch with the individual in charge of the site. Establish a working relationship with coaches or team organizers--get their input of field use schedules and any other activities



Birch used all available resources to complete field renovation projects. Here, a grader and skilled operator, borrowed from another department, work on a field.

that could affect the fields. Keep them informed ahead of time about what you will be doing, when it will happen, and what it will accomplish. When maintenance procedures will require taking a field out of play for a time, work with all concerned to minimize the impact to their activities and gain their cooperation.

#### Monitor the program

Continually inspect and evaluate. Once the staff was off to their work assignments and we'd handled any immediate problems, two of my key supervisors and I started our daily tours. Sometimes we worked together, sometimes individually, to walk every field that we were responsible for

at least once, and often twice, each week. We checked the fields we weren't directly responsible for at the middle schools and elementary schools approximately every three weeks to make sure there were no unsafe conditions. This eliminated major surprises since we always knew what was going on at each site. It strengthened our working relationships with those in charge of the sites. It also reinforced the importance of what our staff was doing, encouraging them to identify and report problems at the earliest stages.

Frequent interaction provides opportunities to upgrade your program. By showing how effective aerification had been in improving turf density in specific areas, we were able to gain more time for field access to get the work done. Through pointing out the effect of band practice on the stadium field, we were able to work out compromises to limit their on-field time and still give them a workable practice area.

Many weather-related circumstances are beyond your control. No matter how hard you try to prevent them, mistakes will occur. Be open and honest about these situations, presenting a plan to rectify the damage. We had an instance where an applicator incorrectly mixed a weed control product, turning an entire stadium field from green to brown. Fortunately, we had two months before the start of the football season. With aggressive aerification,

along with application of a soil penetrant and spoon-feeding of fertilizer, the field was in top shape for the first game.

## Planning for renovation

By constantly assessing field conditions, it becomes easier to identify those in greatest need of renovation. You'll know which fields are hardest to maintain and what and where the problems are. Because every program has to work within a budget, you'll need to establish a rating system to set the priorities for renovation.

Safety must come first. Any unsafe conditions at a practice field used by the youngest players must rank higher in priority for renovation than the aesthetics of a high-profile stadium field. That doesn't mean a complete renovation

is required for each field. Evaluate field condition in sections, pinpointing the problem areas. To spread resources as far as possible, evaluate different renovation practices to determine which can most effectively solve specific problems for the least investment in equipment, materials and labor hours.

By renovating the fields in greatest need each year, over time, you'll develop a rotation system. You'll discover how to extend field use with preventive maintenance practices and small area renovations on some fields to allow complete renovation of others. You'll be able to determine which soil profiles and which types of turfgrasses function best under specific conditions, and plan your renovation procedures to match. You'll find the overall quality of your fields improves continually, but so do your standards and the expectations of your field users.



Birch used rototilling for this partial field renovation in 1991.

## Field renovation tips

In a large system, when a complete field renovation is required, you may have access to heavy equipment and skilled operators for soil removal, leveling, soil replacement and proper grading. In a smaller system, you may need to contract with a separate company for this work. In either situation, the right equipment and the most skilled operator will save time and money in the long run. Plan to have a staff person on-site for every renovation, with a supervisor checking in once or twice a day. It's less costly to do something right the first time.

For many football, soccer, lacrosse or multiuse fields, the greatest wear is in the center of the field. We found the area behind the goals or goalposts was our best source for sod replacement, since the turfgrasses and maintenance

practices were identical. We used a sod cutter to



Birch matched renovation methods to field needs and budget resources. This field is sprigged rather than sodded.

remove the bad sections and cut matching sections from the end zone to replace it. With our sandy native soils and bermudagrass, the areas we cut out would often fill in naturally in time for play. If we had larger cut out sections, we could cut sprigs from the worn sod to spread into those areas for faster fill in.

In northern regions, with multiple types of cool-season turfgrasses on a field, you might fit the worn sections into the end zone or fill in the area with material to match the soil profile and overseed.

With more extensive renovations, always talk with the individual in charge of the site and with the coaches for that sport before starting the project. We'd always tell the coaches that we wanted to tear up the field to make it better, but depending on weather conditions, it might not be grown in by the time practice started. Getting their cooperation up front saves grief later on.

Your regular monitoring will alert you if the newly renovated field is getting excessive wear. Be prepared to meet with coaches, discuss the problem and offer suggestions, such as rotating the site of daily scrimmages, to alleviate the problem.

Keep learning--read magazines, attend seminars and conferences and talk with other sports field managers. When you have a problem, ask for help. I continue to be amazed at the wealth of information people in this profession willingly share. I'd have accomplished little without their input and the dedicated commitment of an excellent staff.

*Ed Birch was dubbed the "Sultan of Safety" for his focus on maintenance and renovation of the athletic fields of the Broward County, Florida, school system. After a successful career in property management, he found a new challenge and dedicated 15 years to contributing to the safety of children and the advancement of sports, retiring in April of 1995. Ed Birch can be contacted via [email](#).*

Photos courtesy of Ed Birch.