Because CEC is a function of the clay and organic content of the soil, and clay is generally the dominant of the two, CEC can also be a good indicator of other soil characteristics such as drainage and ease of compaction.

Last but not least is salt content or EC (electrical conductivity). Different labs report results in different units of measure. These units can be millimhos/cm (mmhos/cm), decisiemens/meter (DS/m), or parts per million (ppm). These units can be converted as follows: 1 mmhos/cm = 1 DS/m = 640 ppm

Rutgers lab assigns a status to the level of salt content. The status levels are as follows:

0 – 0.2 mmhos/cm = Low salt concentrations - may be too low for turf growth
0.2 – 0.5 mmhos/cm = Medium salt concentrations - a satisfactory range for turf growth.
0.5 – 0.8 mmhos/cm = High salt concentrations - slightly higher than desirable
Above 1.5 mmhos/cm = excessive salt concentrations - plants dwarfed, failure in established turf becomes evident.

Determining and maintaining optimum fertility levels in the soil is only the start of providing a healthy environment for turf development. There are a total of 17 nutrients necessary for the healthy development of turf. We have discussed only a few. The remaining nutrients are typically needed in smaller amounts and are generally readily available. These nutrients become a much greater consideration in sand based fields due to the relatively low nutrient holding power of these soils.

When problems in turf health and vigor arise and remain undiagnosed, based on information provided by your soil test it may become necessary to investigate the availability of micronutrients by further soil testing. The turf manager may also elect to do a tissue analysis of the turf in question, and compare the results to a tissue analysis on healthy turf. Soil and tissue testing are available through a number of commercial test laboratories as well as:

Rutgers Soil Testing Laboratory
P.O. Box 902,
Milltown, NJ 08850.
Telephone: (732)932-9295 ;)

---

‘Effective Communication Skills’
A Key Component for Athletic Field Managers

By George Van Haasteren, CGM
Sports Field Management Systems

From time to time, I hear from athletic field managers across the country on how difficult it is for them to get their point across to the people above them. Another concern from grounds managers is that they feel that they constantly have to justify their position or their department. For the most part athletic field managers are a rare group who are totally dedicated to their profession. They know how to grow turf, identify weeds, diseases and areas that need repair to reduce injuries and liability. The difficulty lies in when everyone around them “seems” to know their job better than they do. This may be the result of not knowing how to present their ideas and thoughts through memos, reports or careful budget preparation.

We may know more than those who we report to when it comes to caring for the fields we maintain but it matters little if we have difficulty in communicating our ideas or thoughts to those we report to. That is why it is equally important for the manager or supervisor to equally be proficient in having effective communication skills.

I believe that in order to have those above you understand and support you, you need to be equally as good or if not better as they are when it comes to your writing and speaking skills, budgeting, computer skills, labor laws, diversity, gender issues etc.. To do so, I recommend the following ways that will aid in being a truly successful athletic field manager:

Attend workshops, seminars or classes. Don’t just attend something that pertains to the technical aspect of grounds management. Look for something that you know that you need to improve on as a manager or supervisor and that you will benefit from.

If you have difficulties working with your computer skills, take a course or courses that will assist you. Continued on page 10. ‘Skills’

---

Did You Know? Soil Compaction can cause nitrogen to be unavailable to the turf, thus wasting time and money.
"Sports Field Managers" Certification Program

The Sports Turf Managers Association (STMA), having recognized the importance of fostering and improving professionalism within the sports turf industry, has developed a certification program for Certified Sports Field Managers. The purpose of the program is to:

- Increase professionalism in the sports turf industry
- Promote Better and Safer Sports Turf Areas
- Establish credentials that signify a specific level of expertise
- Increase career opportunities and promote the sports turf management profession
- Provide recognition for attaining a level of expertise and performance as professionals in the industry
- Stimulate and motivate improved performance and increased professionalism
- Increase opportunities for education and training

Additionally the STMA has established continuing education requirements that all Certified Sports Field Managers must satisfy to maintain their status as a STMA Certified Sports Field Manager (CSFM)

In order to attain the designation of Certified Sports Field Manager, a candidate must satisfy: 1) the Basic Requirements; 2) the combination of education and experience point requirements; 3) pass a national certification examination. There is an application fee of $250 for STMA members and $350 for non-members, a testing fee of $100 for members and non-members.

STMA offers other member benefits including: facilities tours, a national awards program, a bimonthly newsletter, Sports Turf Topics (their compendium), an annual membership roster and resource manual, a monthly magazine, the annual conference and exhibition, and this certification program.

If you are interested in receiving more information about becoming a member or on the certification program contact the National Sports Turf Managers Association at 1-800-323-3875 or e-mail SportsTMgr@aol.com You can check out their web-site at www.sportsturfmanager.com

"Monthly Field Tip"

Shoot first and ask questions later. When grading or renovating your infield, use a transit level to shoot elevations of turf perimeters, base paths, base inserts, home plate, pitchers mound etc. Document these elevations to use as a reference any time drainage or other problems arise. Water typically requires a 1% slope (1/8" per foot) to flow freely off an infield. Try to maintain a minimum of 1% slope on all skinned areas.

Note: Whenever shooting elevations, always shoot a benchmark. This is the elevation of a stationary object in the close vicinity of your infield such as a catch basin, head wall etc. This benchmark can be use as a reference to correlate changes in field elevations caused by wear, erosion, lip buildup etc.. If your benchmark reads 4' this time and 5' the next time you are taking shots, all you need to do is add 1 foot to all your documented elevations and they will be relative to your new shots.

'Skills' continued

Most work is generated and done through a computer. Text writing, spreadsheets and e-mail are now becoming part of the daily norm. Not to be on top of this as the person who oversees daily activities of your athletic fields could have an effect as part of effectively communicating to others.

For those who have trouble conveying their thoughts or recommendations on paper, look for a class or workshop that will strengthen that area. Also, as an athletic field manager it is very important to stay current with the laws and regulations that pertain to labor, gender and diversity as well as having a knowledge of the budget procedures at your place of employment.

Join and get involved with your association. Joining and becoming involved with your association represents who you are and what you do. This is a great way to expound upon your role as a athletic field manager. Networking and building professional relationships with others both locally and nationally, I have found to be a tremendous asset in dealing with problems and finding solutions. Get involved, attend national and local meetings and be an active member.

Remember, the industry is constantly changing. To be the very best in athletic field maintenance and management you need to be at the top of your game. It all begins with communication. ;)