Risk Management Trend - Stretching

- Risk managers have the ability to improve their worker's compensation claims experience, reduce their premium rates, and create a safer work environment by using safety initiatives. A fast growing trend in the Hotel, construction, and field maintenance industry is initiating a stretching and flex program.
- In industries where strains and sprains are by far the most frequent and costly injuries, more risk managers and field professionals have adopted a "stretch and flex" regimen to minimize on the job hazards.
- Locally, companies such as Marriott Hotels, Motorola, Arlington Heights Park District, Siemens, and Alexian Brothers Medical Group have joined the Hoffman Estates Park District in conducting daily stretching and flex routines.
- Kevin Clary, vice president of loss control for Amerisure Insurance Company in Chicago stated "If you'd told me five years ago construction workers would do this {adopt stretch and flex programs} I'd say it won't happen...we've been seeing {stretch and flex programs} more and more over the past 5 years," Clary said, noting that many large firms now require that employees at the job site engage in at least 10 minutes of stretching before starting work.
- Regardless of insurance economic trends, many risk mangers can reduce cost and injury rates by implementing stretch and flex programs.
- Zurich Insurance Company stated in a recent report that, based on information from more than 100 companies implementing workplace stretching programs from 2009-20012, the underwriter saw an overall 61% reduction in strain/sprain frequency and a 30% reduction in strain/sprain severity. The report was written by Patrick Clarke, Zurich Services Group Risk Engineer Manager.
- Oregon State University studied a municipal firefighter group for 6 months and tested the firefighters for flexibility. The stretchers were more flexible than the non-stretchers. Beyond that, after 2 years the difference in dollars spent to address injuries was staggeringly different: $85,372.00 for stretchers versus $235,131.00 for non-stretchers. Time loss figures for stretchers amounted to $45.597.00, non-stretchers $147,581.00. Medical costs for stretchers was $39,775.00, non-stretchers $87,550.00.

References:

1. Kevin Clary – Vice-president Loss Control, Amerisure Insurance
2. Zurich Insurance Company – Patrick Clarke, Group Risk Engineer Manager
3. Oregon State University

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Parks Division Industry Trends 2014

Athletic Field Design and Maintenance Trends

In order to stay ahead of the curve and on the cutting edge of any industry, recognizing trends in one's industry is very important and useful. After researching the internet, professional periodicals, and interviewing several professionals in the industry, the most significant trends in athletic field design and maintenance are as follows:

- Hard infield surfaces, most notably those with a limestone base topped with crushed granite have become popular for several reasons, according to Jim Walsh of Sports Field, Inc. Superior drainage capabilities allow for fewer rainouts or weather related cancellations, thus increasing revenue on rental facilities and avoiding costly schedule breaks inhibiting maintenance practices. Aesthetically the crushed granite topping looks like the natural mix players are used to seeing and remains so with limited maintenance outside of regular infield dragging. Drainage is constructed by pitching the infield sub-grade to a low area and laying a drainage pipe on whichever side of the field you wish the drainage to run. Four to six inches of limestone is compacted with two to four inches of the crushed granite. Not only is the crushed granite used for aesthetics, it serves the purpose of softening the surface, allowing for safe sliding and field play, at the same time it drains well because it is an aggregate product.

- Hybrid infields with a 60% limestone and 40% infield mix gives excellent drainage and also reduces the abrasion experienced when sliding on a limestone infield. Jim Walsh of Sportsfield, Inc. promotes this as a trending application.

- Aeration is essential to professional field maintenance, allowing oxygen to enter the soil barrier and eliminating compaction. Historically aeration was achieved by popping 3-5 inch cores out of the ground, allowing the oxygen interaction and de-compaction by the soil healing in, or growing together. While highly effective, it required that the field being aerated be closed for play for a week at a time. This is not possible in our era of March to December recreation schedules. The method that has caught on in several sectors, ours being one of the leaders, is non-invasive aeration, or fracture aeration. Tines of the Aeri-vator machine from First Ayd, Inc. enter the ground to 3-6 inches and vibrate vigorously, fracturing the area below the surface. At the same time, seed is injected into the soil and a rake closes up the entrance holes. The soil is de-compacted, seed is sowed, oxygen is injected into the soil, and the surface is uninterrupted. Regular play can continue the same day with no loss of time or revenue.

- Shaded dugouts and bleacher areas are a new trend in many places that have historically left both in the open air. Residents' concerns over the effects of sun exposure and park districts' overall concern for the health and welfare of their residents have sparked this trend in sports areas.

Turf Management Trends

When trends in mowing practices and equipment for the turf industry were discussed, a majority of professionals remain to this day on the same page

- With the advent of "Z-turn" mowers it has become increasingly unnecessary to add large mowers (14'+ mower decks) to the turf fleet. The trend has been to flood the fleet with the smaller, faster, easily maintained mowers and avoid the high price ticket item (upwards of $60,000-85,000) in lieu of the less expensive more mobile mowers.

- Rotary Mowers vs. Reel Mowers for athletic fields. The park district has followed the trend of the grounds crews at Wrigley Field, the Cell, Toyota Park, and Soldier Field and maintained our athletic fields with rotary mowers. With a more uniform cut and less maintenance involved, i.e., blade sharpening, the trend has become a regular maintenance practice.

Pesticide Use Trends

People around the world have been protesting the use of pesticides in their communities for over one hundred years. They cite ground water contamination, which in turn contaminates the food we eat and the water we drink, adversely affecting humans and animals alike. The greatest concern is that of the health of children and pregnant mothers.

- Over the last several years a growing trend occurring in over 150 communities in the United States and United Kingdom is to celebrate a "Non-Pesticide Week" and to establish "No-Pesticide Zones."

- The "Non-Pesticide Week" is a week set aside during the growing season to bring attention to the perceived perils of pesticide use and educate homeowners of the dangers of over-use.

- "No-Pesticide Zones" are areas set aside where no pesticide is ever used and this is researched by local agriculture extensions to study the effects and repercussions.

- Locally a growing trend is to limit pesticide use to athletic fields and high priority areas, normally around administrative headquarters, especially practiced by park districts and village units.

- Currently in our area Crystal Lake Park District, Glen Ellyn Park District, Streamwood Park District and Lisle Park District have limited their pesticide applications to the athletic fields proper and the surrounding areas are left to cycle through their dandelion and clover cycles. The villages of Itasca and Lombard treat their administrative building and their high priority festival parks. The rest of the area cycles through the weed season naturally.

- Hoffman Estates Park District currently practices an Integrated Pest Management (IPM) program, attempting to minimize the use of pesticides and still produce top quality athletic fields and park areas. With leading edge equipment the District staff is able to culturally treat areas to affect weed control. The use of an aerator that does not pull cores enables the staff to aerate several times a year without disrupting play or park area usage. This coupled with an aggressive fertilization program and over-seeding enables the turf to grow lush and healthy, blocking out much of the weed growth naturally. The staff uses a 50% organic-50% synthetic phosphorus free fertilizer, carrying on the idea of "stewardship" of the area's ecology.

- Several years ago the staff practiced a "front- end" weed control application, applying with a boom sprayer three times across the entire district, athletic fields and parks alike. By applying the cultural treatments mentioned above year after year the staff has been able to cut pesticide use by 60%, doing away with the large tractor pulled boom sprayer and using smaller, more energy efficient vehicles to spot spray in desired areas.

- Athletic fields, because of safety reasons and the desire of residents to participate on manicured sports fields are maintained in a controlled application three times a year. The smallest unit of pesticide that can be used to effectively control pests is used, and no 2,4D (a known carcinogen) is ever used.

- The desire to minimize product and pesticide use has many advantages, cost being one, and easing the public's fear of over-use and contamination, another.

References:

1. Keith Gorcyka – Park Superintendent, Streamwood Park District
2. Mike Farmer – Former Park commissioner, Glen Ellyn Park District
3. Pesticidefreezone.com - 2013

Park Maintenance Industry Trends

- Parks Departments are opting to redirect workers to high profile areas and sports fields. This has had a resultant effect in creating more naturalized areas. While not necessarily a new trend, it has been defined as a trend in reverse. Initially the thought was to create naturalized areas, thus freeing workers for more defined and high profile tasks. While both methods achieve the same means, the new trend appears to be to limit one's labor force, specialize in high usage parts of the district, and thus resulting in even more naturalized areas.

- A trend that has occurred as an off-shoot of the naturalized movement is that of creating more "passive" parks in the districts. The parks are just what they sound like, a passive, horticultural experience for patrons without athletic fields or competitive workout areas. Playgrounds and educational areas are introduced for the children, and gazebos and stages built for concerts and plays for the adults and young people alike.

- A major trend in the industry has been that of park districts dedicating themselves to doing less harm to the environment, making better use of natural resources, cutting waste, and in essence "Going Green". Whether formulating more extensive recycling policies, using LED lighting, reducing paper consumption, reusing office supplies, or adopting a four day work week to reduce energy consumption, all facets of the park district are being investigated to see when and where savings can take place. While not a "new" trend, "Going Green" has received an extra boost in acceptance with the soaring gas prices and global warming being so prevalent in the media.

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1. Whitey Anderson - Reinders, Franklin Park, IL
2. Dana Lonn - Toro Company, Bloomington, MN
3. Recreation Management Magazine
4 Jim Walsh - Sportsfield, Inc
5 Tom Gleason - First Ayd, Inc, Matoon, IL
6. SportsTurf Magazine, April, 2004
7. Environmental Protection Agency periodicals
8. Smithsonian Institution literature
9. Lyle Younker, Tri-County Stockdale Company, Joliet, IL

Naturalized Landscaping Trends

- The trend in landscaping to incorporate wildflowers and native plants continues to increase. The use of these plants has many benefits such as reduced maintenance, (particularly hard to mow areas), weather hardiness, drought resistance, and erosion control to name a few. Within the district we continue to follow this trend at Prairie Stone Sports & Wellness Center and selected areas throughout the district. Within the Prairie Stone Business Park, it is required by the property association to maintain a prairie theme within the complex. In a small way wildflowers and native plants in landscapes are restoring areas back to what they were before development and agriculture. Wildflowers and native plants also add interest to the landscape through multiple seasons.

- In keeping with this trend each year, the Park District continues to shift some passive seldom visited park lands to native no mow plant areas. These areas are passive green space areas that because of their size, location and topography are not suitable for use or development as active park space; (athletics, picnicking, etc.). They are in most cases intended as buffers between residences and roads and waterways. They also serve as utility easements. In these areas the district does an annual mowing at the end of the growing season which helps to slow or eliminate some of the invasive plant species. Controlled burning is the best method to control invasive species, but is expensive and requires specially trained personnel. In some instances controlled burning is not favorable because of our urban setting. Staff has found that the annual mowing is a satisfactory substitute to burning as it is very effective on many of the woody invasive plants (Buckthorn, Honeysuckle, Multiflora Rose).

- The use of aquatic and wetland plants in the landscape continues to grow. Wetland plants are being used to stabilize shorelines and wet areas that cannot be easily mowed. Aquatic plants are being used to enhance the appearance of ponds and improve water quality. Some aquatic plants help reduce the growth of algae by shading the pond bottom and also by taking up many of the nutrients in the water which algae need; this reduces or eliminates the amount of chemical algae control needed. Aquatic plants also provide cover and habitat for fish and other aquatic life, which are important to water quality. Areas where the district is implementing this trend are Highland Park, Charlemagne Park, CCIA pond, Vogelei Park and Westbury Park. At three parks (North Ridge, South Ridge, and Chestnut) the introduction of sterile non-reproductive Grass Carp are being used to control aquatic weeds and algae, eliminating the need for chemical control. Another trend is placing aeration devices in ponds. These devices help aerate and circulate the water which is beneficial to fish and other aquatic life. They also help in reducing some of the algae problems in the ponds, due to the water movement and improved oxygen levels and over all water quality. With better water quality, the population of beneficial pond life plants are increased which also has a direct effect on the amount of algae and pond weed growth. All of this helps reduce or eliminate the use of chemical controls.

- For several years now the planting of perennials is a trend that the district has been implementing. This trend is replacing the practice of replanting annual plant material every year. Perennials are not replacing annuals completely, but are fast becoming the foundation for flowerbeds throughout the district with annuals being used as accent plants. The benefits of perennials are a reduction of annual planting labor and replacement costs. Perennials have hardiness qualities not found with annuals; they are more drought and weather tolerant. They come back for multiple years and increase in size each year giving the ability to be divided and used to plant in other areas saving the cost of additional new plants. Perennials add interest to the landscape year around, especially the ornamental grasses. Because they come back for many years they are also very good at reducing or preventing erosion.

- A trend to increase flower and plant beds began for us in 2002 & 2003, with an increase in shrub beds around playgrounds and park ID signs. This trend is enhancing the appearance of many of the amenities throughout the district. Flower and shrub beds draw attention to some amenities and screen others; they highlight ID signs and entrances and give visual appeal to the parks.

- There has been a steady increase in nurseries and growers that carry or specialize in wildflowers, native plants, aquatic plants, and wetland plants. The number of plant varieties and selection has increased dramatically in the last couple of years, giving more choice and possibilities.

A few references are:

1. Chicagoland Gardening July / August 2008 – Success With Natives
2. Pizzo Ecological Restoration 2008
3. Tallgrass Restoration, LLC 2008 – Renewing Natural Landscapes
4. U.S. EPA January 2006 – Landscaping With Native Plants
5. The Wetlands Initiative – Living With Wetlands, A Handbook For Homeowners In Northeastern Illinois
6. Midwest Groundcovers 2003 – Native Prairie Plants pamphlet
7. Prairie Nursery 2002 – Prairie Plants & Their Use in the Landscape
8. Spence Restoration Nursery 2002 – Native Shoreline Vegetation & The Lake Edge Enhancement System
9. Spence Restoration Nursery 2002 – Vegetated Swales