By Mike Augsdorfer

Regardless of the specific type of grass used on a field, athletic turf is a very sensitive surface. The proper field cover can be an effective tool in a comprehensive field-maintenance program and can actually help to increase the number of days the field is available for use.

Field covers have come a long way from the old canvas tarp that was standard-issue at professional-level ballparks and stadiums. Canvas is no longer a practical material for field covers since it is heavy to begin with and becomes even heavier as it absorbs water. Manufacturers have switched to lightweight materials, such as vinyl and polyethylene.

The introduction of vinyl and polyethylene field covers enabled colleges, high schools and even smaller operations such as municipal fields used for Little League or softball to acquire field covers. The lightweight covers reduced the need for manpower, since vinyl or polyethylene covers could be manipulated by just a few people, whereas the bulky canvas covers required a virtual army of groundskeepers to implement.

Vinyl vs. Polyethylene

While vinyl and polyethylene are both effective as lightweight field covers, the two materials fill different needs. "Polyethylene and vinyl are two distinctly different products," points out Joan Koza, executive vice president of Chicago-based M. Putteman Co., one of the largest manufacturers of lightweight field covers. Vinyl, Koza notes, cannot be calibrated much thinner than ten ounces and still contain enough fiber base for the strength needed as a field cover. "Polyethylene," says Koza, "can be as thin as one mil; however, there are as many types of polyethylene as there are flowers."

The primary advantage of vinyl in a field cover, according to Koza, is that it is tougher and thicker than polyethylene and relatively easy to patch; polyethylene, on the other hand, cannot really be patched. Koza reports that polyethylene is typically half to one-third the cost of vinyl; however, polyethylene does not accept team logos or other decorations very well. While those with budget concerns can get into the field-cover game with an affordable polyethylene field cover, larger operations such as professional sports teams and major universities can afford to purchase the more durable vinyl covers. "Most NFL and major-league facilities choose vinyl for logos and durability," says Koza. "Polys just don't last as long."

Lightweight field covers are useful far beyond simply protecting turf from the rain. Many fields that are not used for sports during the cold winter months in the northern part of the country are covered during the winter to protect sod from ice, snow and freezing temperatures. Some covers act like insulating blankets and can actually keep turf up to ten degrees warmer than uncovered areas. These covers, which are made of polyester geotextile or woven polyethylene and...
lene, are also used to cover golf greens and tees to improve germination and speed spring green-up.

Somewhat surprisingly, most lightweight field covers can stand up to the stress of a hard winter quite well. "From a temperature standpoint, it's not a problem," says Koza. She recommends a cover at least ten ounces per square yard for cold-weather football fields where snow and ice may be a problem. "Poly covers are not the most appropriate choice for cold-weather football fields," she relates. "It really comes down to manpower and economics, as well as application."

Bob Curry of Covermaster Inc., based in Ontario, Canada, reports that improvements in lightweight field covers have expanded their usefulness. "New technical developments in lightweight woven polyethylene have achieved higher tear strengths and color combinations that reduce heat buildup under the cover," he reports. "These new developments mean lightweight woven polyethylene covers are half the weight, half the price, and require half the crew to handle. Only five people are needed to handle a 170-square-foot cover."

Curry says that the lightweight polyethylene covers are durable enough to withstand ice and snow, primarily because the ice will not stick to the cover surface. "Snow and ice can be removed from the cover using a tractor equipped with a rubber-tipped plow blade."

Mark Razum, head groundskeeper at Coors Field in Denver, the new home of the Colorado Rockies, used an Evergreen cover by Covermaster on new turf to promote rooting. "The reason we covered those areas was because the rooting was not taking as well as we had wanted," he explains. "We noticed a significant difference as far as the greening of the turf between areas that were covered and uncovered. The covered areas had a nice green color to them."

Razum admits that he must be careful of burning the turf at the high altitude, but he adds that the lightweight (woven polyethylene) cover holds up well in Denver's harsh winter climate. "We've had eight inches of snow and seven-degree temperatures with no problems," he relates.

Frank Caparelli, head groundskeeper for the Chicago Cubs, cautions that lightweight vinyl and polyethylene covers may be difficult to manage in heavy winds. On the other hand, he adds, a cover that is too heavy requires more manpower. "What we use for baseball is a ten-ounce vinyl because it's easier to handle," he explains. "If you get a lot of water from a good, heavy downpour, you'll need a lot of men. We try to have at least 15 men; if we're short-handed, we may have 12."

Vince Patterozzi, head groundskeeper for the Cleveland Browns, maintains five fields, including Cleveland Municipal Stadium and several practice facilities in nearby Berea, OH. Patterozzi says that field covers are among the most important tools he has for maintaining the quality of the turf at the stadium and at the practice facilities. NFL regulations dictate many procedures for the field at Municipal Stadium. "We are obligated by the NFL that fields must be covered if inclement weather is predicted within 24 hours of game time," he reports. "We try to keep the field as dry as possible."

Patterozzi and his crew also keep the practice fields covered. While the stadium turf is covered with vinyl, Patterozzi uses lightweight, woven polyethylene for practice-field covers, so the crew can get them on and off quickly.

Patterozzi uses growth blankets to promote turf growth after overseeding in March, but he cautions turf managers to use extreme care with field covers in the summer because covered turf can burn easily. "You can take it (the turf) right down," he explains.

One innovation Patterozzi would most like to see is a device that would elevate a field cover enough to allow air circulation. "When rain or snow or ice forms on the cover, it just suffocates the turf," says Patterozzi.

Keeping a field in prime playing condition is no easy task. Lightweight field covers are a valuable tool for turf managers in keeping fields green and playable. Innovations and improvements in lightweight field coverings help turf managers reduce costs in terms of manpower and materials while still providing optimum weather protection for their fields and even reducing spring green-up time. While canvas covers may be nearly extinct, lightweight field covers remain an integral part of overall field maintenance.