SportsTurf MANAGERS ASSOCIATION

Experts on the Field, Partners in the Game.

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SAFE

The Foundation for Safer Athletic Fields

Common Questions from the Field: How long can you leave a tarp on a sports field?

Tarps can benefit sports fields by:

- Protecting them from frost damage and cold temperature injury.
- Accelerating turfgrass growth in the spring.
- Protecting the field during precipitation events.
- Reducing game cancellations.
- Promoting rapid seed germination.

But how long can the tarp cover the field before the grass is damaged? The answer – it depends. STMA's Information Outreach Committee provides their recommendations for keeping your field healthy and playable.

What are the weather conditions?

Tarp coverage times are extremely dependent on daily temperatures and sunshine. If air temperatures are greater than 60 ºF and it is bright and sunny, grass can get cooked or die within a few hours under a tarp. The tarp creates a greenhouse effect and temperatures can soar quickly and kill the grass.

Photo Courtesy of Brad Fresenburg, Ph.D.

How do weather conditions dictate how long the tarp can stay down?

The field manager should be consistently checking the conditions under the tarp and watching the weather closely. In late winter and early spring, tarps can stay on the field between 48-96 hours if air temperatures are below 60 ºF. During warmer temperatures (above 60 ºF) when turfgrass is actively growing, tarps can stay on the field between 24-36 hours. Monitoring conditions under the tarp becomes crucial in warmer temperatures due to disease potential and high temperatures. After 24-36 hours, the tarp should be removed to allow for air exchange and light exposure.

When should the tarp be put on and removed in a rain event?

If rain is predicted, most field managers wait to put the tarp down as close as possible to the rain event and remove it as soon as possible after the storm. In warmer weather conditions, the tarp should not stay down any longer than 24 hours. If there is a break in rain, it is important to take the tarp off and leave the grass exposed for as long as possible before putting it back on for more weather.

Photo Courtesy of Brad Fresenburg, Ph.D.

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Should I tarp a skinned infield area?
Tarping a skinned infield area may prevent it from drying out in the spring. Additionally, a tarp can be used for immediate protection in a rain event to keep infields from becoming too wet in sudden downpours.

Should fungicide be applied to the turfgrass if a tarp is being used?
Monitor temperatures and soil moisture under the tarp. Favorable conditions for disease development skyrockets when temperatures beneath the tarp start to get above 80 ºF and soil moisture is high. Diseases such as Pythium blight can cause significant damage to tarped grass in a very short time span. Cool weather diseases such as pink snow mold do not require snow cover and can develop under a tarp. Consider a preventative disease control program, whether it be using preventative fungicides, or making a phosphite fertilizer application.

Will turfgrass color be affected?
Turfgrass plants will start to yellow after 24-48 hours of being covered. Typically, the field can recover and grow out of discoloration within a few days. The longer the tarp stays on, the more severe the chlorosis will be. Research conducted at Virginia Tech investigated how tarp color affected turfgrass quality. Although there is a lot of variability associated with how soon the turf yellows, a darker colored tarp accelerates yellowing of the grass plants. This can be attributed to reduced light penetration for photosynthetic activity to occur.

Photo Courtesy of Brad Fresenburg, Ph.D.

What is the best course of action?
As a field manager, be sure to check weather conditions and monitor temperatures under the tarp. Tarp for rainfall on a case-by-case basis depending on time of year, moisture content in the field, amount of rain forecasted, timing of rain, and atmospheric conditions. Cycle the tarp on and off the field as needed to allow for air exchange and light exposure. Paying attention and monitoring conditions can help prevent disease, chlorosis, and turfgrass death.

References

2017 STMA Information Outreach Committee (Nick McKenna, CSFM, Peter Auth, Brad Fresenburg, Ph.D., Mike Goatley, Ph.D., James Hlavaty, CSFM, Jason Kopp, Jeff Langner, Doug Linde, Ph.D., Henry Mayer, Tony Strickland, CSFM)

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