

## Are Five-Step Lawn Care Programs Needed

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A recent question asked was about the five step programs for fertilization and pest management in lawns. The person asking was wondering if all applications were necessary every year.

The answer to this question depends on factors like turfgrass type, age of the lawn, soil conditions, pest history, expectations for the lawn, and the level of maintenance a person is willing to do.

On the number of fertilizations, a soil test provides the best answer but at least once a year is needed. This would be considered a low maintenance lawn and grass color and turf density would be affected. If the turf is thin, weeds are more likely to invade.

On lawns where performance expectations are higher, the recommendation of Extension turfgrass specialists is three to four fertilizations a year on lawns 10 years old or younger. The best timing in our area would be late April into May, late June, late August into September and mid to late October. Hitting these dates is easiest for do-it-yourselfers.

For lawns older than 10 years, two applications a year are often sufficient. One in May and one in early September with the latter being most important. Lawns should not be fertilized in March as soils are too cold for roots to absorb nutrients. They should not be fertilized after October 31 as nitrogen can be lost to leaching since roots are not actively taking it up.

Keep in mind the more turfgrass is fertilized, the more inputs of water and mowing it will require. And turfgrass receiving the maximum amount of nitrogen is more susceptible to fungal diseases.

For responsible pesticide use that is less likely to harm the environment or lead to pest resistance so certain pesticides are no longer effective, annual applications are rarely if ever needed. Applications need to be based on the history of a pest problem.

The word history may be interpreted that if a lawn has ever had a pest problem, then pesticide applications are justified. This is not what is meant by having a pest history. In most cases, such as with white grubs, sod webworms, billbugs and diseases like summer patch, history means the previous year.

Whether an application is needed the following year depends on damage severity and the turf owner's acceptance level. Since most lawns recover fairly quickly on their own or with over seeding, some people are willing to put up with some brown spots or areas in their lawn now and then.

Many types of pesticides, especially newer insecticide chemistries, work best when applied as preventives. This has led to an increase in unnecessary applications of pesticides that can lead to pest resistance and harm to non-targets like pollinators.

Insecticides for white grubs are an example. While there are insecticides which can be applied after egg hatch, when we know there are high enough numbers to cause damage that year, many products need to be applied prior to egg hatch. This is why they tend to be applied on a just in case basis which is not responsible pesticide use.

Applications of preventive insecticides for grubs are recommended the year after a lawn had unacceptable damage and eight grubs per square foot were found the previous year to confirm grubs as the cause; and when the homeowner is not willing to accept any damage.

Before applying pesticides for insects, weeds or diseases, learn what the thresholds are for various pests, the most effective timing for pesticide applications, and what management practices can be used to reduce damage and unnecessary pesticide use.