

Stop 1. Long-term Management of Japanese Beetle Grubs on Home Lawns

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Recent research by Smitley that was supported by MTF and Project GREEN led to the release of a pathogen which helps to suppress populations of Japanese beetles. A protozoan (*Ovavesicula popilliae*) known to infect Japanese beetles and no other insects or animals was found to be present in Connecticut and absent from Michigan. The protozoan pathogen was introduced into research plots at three golf courses in Southern Michigan. Six years after introduction of *Ovavesicula*, we documented a 55% reduction in Japanese grubs along with a significant reduction in egg production. Overall impact provides an average population reduction of 64% per year due to *Ovavesicula*. The natural spread of the protozoan is slow, so to speed up the process Smitley has held Biocontrol field days where golf course superintendents and Michigan residents can pick-up Japanese beetles infected with the protozoan to take back to their own course or lawn. Long-term research (from 1999 to 2008) supported by MTF documented the spread of the introduced pathogen and declines of Japanese beetle where it became established.

Objectives:

(1) Hold biocontrol field days at three locations in Michigan to facilitate distribution of the pathogen throughout Michigan, wherever Japanese beetle has been found.

Stop 2. Phosphorus Restrictions for 2012

Dr. Kevin W. Frank

Following approximately a decade of discussion in the state of Michigan, a statewide phosphorus restriction policy was signed into place on December 16, 2010. House Bill 5368 is now included in the Natural Resources and Environmental Protection Act 451, Part 85 Fertilizers.

The basics of the bill include:

- (1) Beginning, Jan. 12, 2012, phosphorus applications to turfgrass are prohibited except to correct a phosphorus deficiency indicated by a soil or tissue test, during establishment, or by a golf course staff that have been certified as a result of staff completing a training program.
- (2) A finished sewage sludge product, an organic manure, or a manipulated manure may be applied to turf at a rate of not more than 0.25 lbs. P/1000 ft² at any one time.
- (3) Fertilizer shall not be applied to turf less than 15 feet from any surface water, unless 1 or more of the following apply:
 - a. A continuous natural vegetation buffer at least 10 feet wide separates the turf from the surface water.

- b. A spreader guard, deflector shield, or drop spreader is used when applying the fertilizer, and the fertilizer is not applied less than 3 feet from the surface water.
- (4) Fertilizer spreaders should not be washed in a manner that water from the spreader will discharge directly into waters of the state.
- (5) Fertilizer on impervious surfaces must be contained and applied either to turf or returned to an appropriate container.
- (6) Fertilizer should not be applied when soil is frozen or saturated with water.

Turfgrass managers may continue to apply phosphorus in 2011 and this act immediately preempted any local unit of government from enacting a fertilizer ordinance. All phosphorus ordinances enacted prior to Dec. 16, 2010 are still in effect. Sod production is not affected by this act. Homeowners establishing lawns from either sod or seed will still be able to apply phosphorus during the 1st year of establishment. Following the establishment year, homeowners would only be able to apply phosphorus if a soil or tissue test indicates a need or a finished sewage sludge, organic manure, or manipulated manure are applied according to the guidelines discussed in the act.

Following the passage of the House Bill and subsequent amendments to Act 451 Part 85, there have been some proposed changes to the language in the Act. Currently these changes are being proposed and whether or not they move through the legislative process in time to go into effect in 2012 is undetermined. The proposed changes are:

1. **Section 8501 (o).** Change “finished sewage sludge product” to “biosolids” to be more consistent within NREPA.
2. **Section 8501 (z).** manipulated manure. Keep this definition and add a new definition, natural fertilizer, instead. The natural fertilizer definition comes from the Association of American Plant Food Control Officials (AAPFCO) Official Publication.
 “Natural Fertilizer” A substance composed only of natural organic, natural inorganic, or both types of fertilizer materials and natural filers.
3. **Section 8512b(4):** Change sentence to read: “A person may apply **biosolids**, an organic manure, a **natural fertilizer** or a manipulated manure to turf at a rate of not more than 0.25 pounds of **available phosphate (P₂O₅)** per 1000 square feet at any time.”
 - a. changed “a finished sewage sludge product” to “**biosolids**”
 - b. added the term “**natural fertilizer**”
 - c. changed “phosphorus” to “**available phosphate (P₂O₅)**” for technical accuracy