

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

Dr. David Smitley and Terry Davis

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.