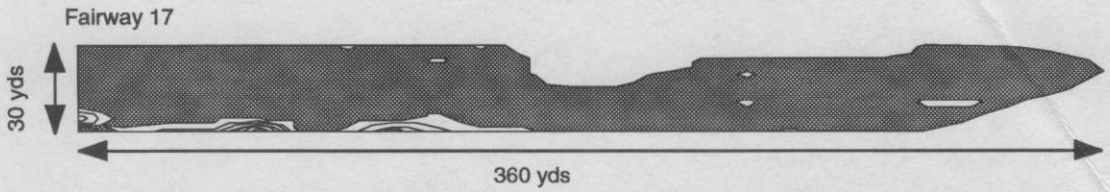


**Figure 7. Intense sampling can serve as the basis for clear resolution of patch boundaries. Use of a 5 yd x 15 yd grid is depicted here.**

shown in Figure 7 reveals a few dense patches on one side, but almost no grubs in the rest of the fairway. Mapping the boundaries of such patches requires sampling at an intensity of about 5 yards by 15 yards, however. To identify individual patches within fairways therefore requires about four times as many samples as simply identifying infested fairways. The payoff for making this extra effort can be substantial, though, since on some fairways the resulting reductions in pesticide use can exceed 90%.

Such dramatic reductions cannot be expected on every fairway, but a new research program has begun at the New York State Agricultural Experiment Station to determine the economic and environmental costs and benefits of spot treatments based on this kind of heavy sampling. Results will be out within the next few years. At that time, we will be in a position to make recommendations about sampling intensities and decision rules. Also, we should have more detailed estimates of potential cost savings and pesticide reductions.

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## In Future Issues:

- Pesticide Fate in Turfgrass
- Relationships between Insects, Insecticides and Soil
- Nematodes
- Winter Weed Control
- Degree-day Modeling
- Risk-taking and Pest Management
- Rewriting (?) the Rules at EPA