2000 INTEGRATED PEST MANAGEMENT/INTEGRATED CROP MANAGEMENT PROGRAM REPORT FOR ALBANY, SCHENECTADY AND RENSSELAER COUNTIES

Background:

As EVERYONE associated with Agriculture in New York State is painfully aware, we had a miserable cropping season in 2000. Despite this, and low milk prices and high oil prices, our number of farms receiving IPM has stayed constant at nine. Two farms withdrew, but two joined. There are now four farms paying for the program out of their pockets. With weather and economic conditions as they were for 2000, our participation rate says a lot about how area producers feel about the program. The push to get soil sampling completed on area farms has become a more pressing issue now that farms are receiving Environmental Quality Incentives Program (EQIP) and/or Agricultural Environmental Management (AEM) funds to complete projects. These farms are required to have a Comprehensive Nutrient Management Plan (CNMP) in place for their operations before work can get underway. This requires the farms have manure samples analyzed and current soil samples for all their crop fields and in many cases their pastures as well. Five area farms newly designated to receive EQIP funding had soil and manure testing done by Albany County's Field Technician Terry Lavigne, and one farm receiving no cost sharing whatsoever had all their fields spring scouted and soil sampled. This totaled 1,471 acres soil sampled above and beyond the nine farms enrolled in IPM/ICP. Total Acres Served: 5,793.

TABLE 1

County		**Totals**	**Corn**	**Alfalfa**	**Grass**	**Small Grains**	**Flowers, Veg., Fruit**
Albany	# Of Fields	**346**	**137**	**123**	**49**	**21**	**16**
7 Farms	# Of Acres	**3,223**	**1,256**	**1,088**	**477**	**234**	**68**
Rensselaer	# Of Fields	**42**	**19**	**16**	**7**		
1 Farm	# of Acres	**594**	**278**	**192**	**124**		
Schenectady	# of Fields	**44**	**15**	**21**	**8**		
1 Farm	# of Acres	**505**	**142**	**216**	**147**		
TOTALS	# of Fields	**432**	**171**	**160**	**64**	**21**	**16**
	# of Acres	**4,322**	**1,676**	**1,496**	**748**	**234**	**68**

Fields that remained idle during the 2000 season are not included in the tally, though they often times required the most scouting. Each time it looked as if we might get a window of decent weather, I would be asked to check the idle fields to see what kinds of weeds were present and how tall they were, etc. I scouted some idle fields four times this year in preparation to planting a crop. Some fields were treated twice with Round-up, only to see the cold, wet weather return before anything could be planted. Plans for those fields changed three to four times during the growing season. Some were eventually planted to rye, oats, or sorghum-sudan and made it into the final tally, but many fields just stayed unplanted.

PESTS:

Pests were present, and in some cases there were severe infestations; but overall, pest problems were overshadowed by the biggest problem: the cold, wet growing season. The biggest pest problem I observed this year was bird damage to late-maturing corn. Normally silage has been harvested and grain corn is drying toward black layer by the time the blackbirds, etc. begin gathering in large flocks. This year, however, the kernels in many of the fields were still soft, and that encouraged the birds to feed. This late and fairly extensive damage not only lowered the energy content of the whole plant, but also opened up ears to attack by fungi and molds. Much of our area's corn was not ready for silage until mid-October. By that time birds and late corn earworm feeding had damaged 70% of the ears in some fields. We had a frost in the third week of September that only killed the tops of the corn plants. Despite being advised to wait until whole plant moisture levels dropped, (and the grain at least reached dent stage), some area farmers started harvesting wet, immature silage a few days after that first frost. I think farmers just did not want to wait for one more bad thing-say a hurricane or maybe an asteroid impact-to happen and take away what little corn they had been able to grow. The early harvest effectively limited bird damage and mold proliferation, but meant very high moisture feed was being ensiled (tests show much corn chopped then in the 78% range of moisture). The net loss of dry matter, energy and palatability on this wet stuff is likely to exceed losses from birds, molds and lodging sustained by farmers who waited to put in drier silage.

It was nearly three weeks later that our area got another significant frost, killing the outside rows of corn, but only killing the majority of the field to the leaf-joint above the ear. Most of the corn in the County was now about 72% moisture. One grower did not harvest until the 27th of October and ended up with an almost perfect silage at 67% moisture. I took a lot of flack from this family, as even the most notoriously late farmers were already well along with chopping. When the moisture test was done on the silage, I suddenly became a wonderful guy!

Corn rootworm was found over threshold in only about 40% of 2 year and older corn fields. The number of fields over threshold was 17. This very low number was not only due to poor conditions for the rootworms, but also fewer older rotation corn fields. This year there were only 42 fields enrolled that had been in corn three years or more. Total number of beetles found was 1,741 on 2,216 plants examined. This comes out to .773 beetles per plant, by far the lowest number I have seen in six years of scouting. I believe these low numbers were due to so much corn being planted mid June and later, and the fact that many fields were saturated or underwater for many weeks this past spring.

Rootworm numbers were strangely off of the usual this year. Normally we see 50% to 63% westerns in the population in any given county. This year Albany and Rensselaer had numbers that could have been predicted from looking at the previous year's reports, of 65% and 62% respectively. But Schenectady County dropped all the way down to 22% westerns. I sampled this farm on three separate occasions and found a few more westerns on my last check, (September 11th), but not enough to boost numbers anywhere close to expectations. Maybe the westerns emerged first and moved out of the corn in search of other pollen sources, or maybe the westerns hatched first and were drowned by heavy late may rains.

2000 CORN ROOTWORM DATA

County	**# of Fields OT**	**# Acres**	**Total Rootworm**	**% Westerns**
Albany	11	129	1,078	65.5%
Rensselaer	3	46	227	61.6%
Schenectady	3	45	436	22.2%
Totals	**17**	**220**	**1,741**	-

Alfalfa weevil was more of a problem than usual because many fields could not be harvested until after the pest's life cycle was complete. However, only two program fields were found to be over threshold. Neither of these fields was harvested until late July. Fields with 25% alfalfa or less experienced total feeding damage, but are considered grass fields so far as management is concerned.

Potato leafhopper posed a problem on some fields that could not be harvested. Populations on these fields just kept growing. Farmers did not look at fields that could not be harvested as candidates for spray treatment because the standing feed had already become so poor. Even fields that did get harvested on a more or less regular schedule experienced some population explosions. One set of ten sweeps netted over 150 PLH on a field nearing 2nd cut in mid July in Albany County. Harvesting made little impact on the populations, probably because it rained a couple times after mowing (when didn't it rain this season??), so the hay sat in the field six days before chopping. This and near by fields required treatment, as did two other fields on another farm. This totaled six fields that needed chemical treatment for the 2000 season. Total number of fields over thresholds was 67, but many of these were fields where farmers threw up their hands and let things take care of themselves until the soil finally dried enough to make mowing possible.

Seedings of PLH resistance alfalfa were also hit particularly hard, with numbers in the high 200's for 3 sets of ten sweeps on stands <10". Two seedings were sprayed despite their resistance to PLH and made a nice come back in late summer/fall. The block of PLH resistant alfalfa planted 5 years previously experienced significant stunting and yellowing at levels only slightly above threshold. I am guessing that, 1. resistant plants have slowly died out, leaving more than 50% susceptible stand, or 2. a large influx of adults entered, fed and moved on. I also found a lot more nymphs in these fields this year than in years past. These fields were fall killed for no-till corn planting in 2001. Most alfalfa fields responded well to early harvest and did not

go over threshold again. Normally heavy rains will control PLH numbers. This year there were many uncut fields with heavy stands on them. Hoppers were able to avoid being swept to the ground by sheltering in the sheer volume of herbage present.

Weed control in corn was excellent in fields that received weed control. There were plenty of fields this year that did not. I don't believe any further explanation is necessary.

IMPACT:

The year 2000 saw more growers participating in the program without any cost sharing incentives. As noted earlier, this is a strong statement on the program's worth when farmers are willing to spend money on it when farm economies are in such desperate straights.

More growers are having their soils and manure analyzed to get accurate information and fertility needs and to develop a cropping program. Having a plan is often the first effective step toward consistent profits.

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