The New York State Cattle Health Assurance Program is a process-oriented approach to the achievement of livestock health and productivity goals for New York State cattle operations. The program continues to expand in terms of number of participants. This issue documents some of the successes that have been realized through active program participation. Although the combined effects of low milk prices and high feed costs have significantly reduced discretionary spending, significant gains continue to be made in the areas of biosecurity, animal health, productivity and product quality. This demonstrates the fact that many goals can be achieved through the modification of practices and procedures without burdening an operation with substantial additional costs.

I would like to take this opportunity to thank all of the program providers including the NYS veterinary practitioners, government, Cornell University, NYS Animal Health Diagnostic Laboratory, agribusiness and insurance companies. All of these groups have gone the extra mile to provide and promote the development of sound principles that lead to the safeguarding of animal health, food quality and production.

None of these efforts would be worth anything without the dedicated and innovative application of these principles on the farm. The producers in New York State have adopted management principles, evaluated recommendations, incorporated surveillance and monitoring strategies and, in general, tested the strength of on-farm process controls. Your efforts continue to expand the knowledge base from which practical solutions to the increasing spectrum of farm issues can be formulated.

Many other states have now adopted similar approaches to health issues for livestock operations located within their borders. Maine, New Jersey, Vermont and Pennsylvania have active programs based in principles similar to NYSCHAP. A regional initiative known as the Regional Dairy Quality Management Alliance (RDQMA) is also active in promoting NYSCHAP principles in the Northeast group of 13 states. All of these programs will increase the level of knowledge about the health of discrete animals populations, and a foundation from which sound animal replacement decisions can be made. Improvement of the health of the national herd can only be achieved through such initiatives. Last year, Governor George E. Pataki signed new legislation that provided for the long-term support of the NYSCHAP program. This is evidence of the increasing credibility and confidence that these systemic approaches to animal health and pre-harvest food safety represent.

As the business forecast improves for the near term, I encourage you to continue to focus on practices that will limit the introduction of infectious disease, dampen on-farm disease amplification, and limit transmission to other populations and the environment. We have made significant strides in the recent past. NYSCHAP continues to grow and incorporate new elements that may be applied to suit particular needs. As always, the program is voluntary and confidential. We congratulate each of you on your efforts and successes and look forward to continued progress.

### # of Farms Enrolled in NYSCHAP

<table>
<thead>
<tr>
<th>Year</th>
<th># Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>25</td>
</tr>
<tr>
<td>1999</td>
<td>160</td>
</tr>
<tr>
<td>2000</td>
<td>199</td>
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<tr>
<td>2001</td>
<td>223</td>
</tr>
<tr>
<td>2002</td>
<td>144</td>
</tr>
<tr>
<td>Total</td>
<td>751</td>
</tr>
</tbody>
</table>
Beef Quality Assurance—Plus

Kathy Kaufman, NYSCHAP Coordinator

Most beef quality assurance certification programs discuss vaccine injection sites; however, NY’s program goes far deeper. This was the case at the Oakhill Land & Cattle Co., where the NYSCHAP team gathered for the annual review. There was quite a discussion about vaccines, not only about sites, but also about the appropriate vaccines to use and when to administer them for all groups, including calves, cows, replacement heifers and bulls.

Last year Eric Bentley enrolled his beef farm in NYSCHAP because he was having some reproductive problems in his cows—the bonus was that he also became a NYS BQA Certified Producer. The NYSCHAP team comprised of Eric, Dr. Steve Yousey (Ridge Animal Hospital) and Dr. Cricket Johnson (NYS Ag & Markets). Eric and his father, Brad, operate the 230 cow beef operation in western NY. They feed out the steers to ~700 lbs. and then sell them to a local feedlot that finishes, slaughters and markets the meat. The herd health program at Oakhill helps to keep the stockers from getting sick when they enter the feedlot.

Treatment records are critical for any livestock quality assurance program. Eric keeps a notebook to record treatments, but it mostly gathers dust. Due to the combination of a strict herd health and vaccination program and excellent veterinary support, Eric rarely treats any of the approximately 500 cattle that move through or live on the farm. Eric states, “We have virtually eliminated scours and respiratory disease. Anything treated on the farm is usually a fluke.” Less treatments mean less chance of injection site lesions, antibiotic residues and better growth rates.

Ninety percent of the cow herd calves in April making early spring a busy time at Oakhill. Herd vaccination and low disease risk are critical for a smooth calving season. The NYSCHAP team discussed how to keep diseases such as leptospirosis, BVD and Johne’s disease out of the herd and doing some surveillance testing to determine the amount of these diseases already in the herd. Eric and Brad have a healthy herd of cattle currently and NYSCHAP will be there to help them keep it that way.

By linking the NYS BQA Certification with NYSCHAP, beef producers in NY get more than just education about injection site lesions and other quality issues. They also receive farm-specific herd health programs to help the farms progress. The bottom line is that product quality can not be separated from animal health and biosecurity.

NYC’s Watershed Agriculture Program Links with NYSCHAP

Dr. Dwight Bruno, Division of Animal Industry, NYS Department of Agriculture & Markets

At first glance, it may seem that an entity like New York City’s Watershed Agricultural Program, which evolved out of a need to protect drinking water for 9 million plus New York City residents, would have little in common with the likes of New York State’s Cattle Health Assurance Program (NYSCHAP), but a closer look reveals that they, in fact, share much in common.

Both NYSCHAP and NYC’s Watershed Agricultural Program promote progressive herd management through the use of established best management practices. Managing cattle in a manner that facilitates their productive potential by keeping them and their environment ‘healthy’ go hand in hand. Such an approach has the potential to be beneficial to agriculture while helping to maintain environmental quality so important to a watershed. Many of the issues addressed by NYSCHAP are centered on maintaining herd health by minimizing the chances of bringing disease into a herd and / or helping to control and eradicate disease that may already exist. Healthy animals are better equipped to resist disease and healthy herds are less likely to shed disease-causing organisms into their environment.

Trish Westenbroek, a Cornell Cooperative Extension dairy-livestock educator with NYC’s Watershed Agriculture Program, has taken the lead in coordinating NYSCHAP enrollment of producers within the upper NYC watershed region. The process involves contacting producers who have expressed an interest in NYSCHAP in order to establish a convenient time for a farm visit by the NYSCHAP team. At the onset of our visit, NYSCHAP is explained and any questions the producer may have, are addressed. If the producer decides to enroll (to date, all have), basic farm information is collected and a farm tour is completed. A farm plan will be formulated from the process.

It is hoped that additional producers will show an interest in NYSCHAP. The process of enrollment is relatively easy and the potential benefits are impressive. A comment to a producer by Trish Westenbroek summed things up quite nicely, “Remember it’s your herd but it’s their health [cattle] that will influence your success as a producer in the dairy-cattle industry.”

**NYSCHAP and NYC’s Watershed Agriculture Program continue to be maintained as separate, independent programs.**
One Step At a Time
Dr. Pepi Leids, Division of Animal Industry, NYS Department of Agriculture & Markets

The only consistent thing about dairy farms and Johne’s disease control programs is constant change. This has been the case at Will-O-Crest Farms. The Johne’s control program began in 1998 when Barb and Bill Young enrolled their 650 cow farm in NYSCHAP. Although the clinical cull rate due to Johne’s was low (~2%), the Young’s wanted to control the transmission of the disease to future generations.

The initial risk assessment identified some very high risk factors for the spread of Johne’s disease. These included a common calving area (bedded pack) that was often overcrowded; feeding waste milk to calves; feeding refusals to heifers; direct contact between heifers and cows in the freestall; having the sick pen adjacent to the calving area; and occasional purchase of heifers. Many of these practices were corrected during the first year in the program. However, it was not possible to build a separate calving pen, although a corner of the bedded pack was designated as the calving area.

Over the past five years several changes occurred at Will-O-Crest. In 2000, the Youngs combined their herd with Kim Skellie’s, thereby increasing the herd size to 760 cows. The herd size has grown slightly to 778 cows by the end of 2002. In 2001 individual box stalls were constructed for calving. These are cleaned thoroughly in between use and the calves are removed to an outside pen within reach of the cow. Will-O-Crest has also constructed a separate Johne’s calving pen for likely Johne’s positive animals or known shedders. It will take a few years for the calving pen management changes to manifest themselves in a lowered cull rate for Johne’s. Although some excellent management practices were put into place within the first year the calving area has certainly been the highest priority.

Testing for Johne’s disease was used to supplement the management practices. The testing program has changed each year as follows:

- 1998-ELISA blood test at dryoff
- 1999-ELISA blood test at mid-gestation with fecal culture follow-up
- 2000-ELISA blood test at 60 days in milk with fecal culture follow-up
- 2001-ELISA blood test at pregnancy check with fecal culture follow-up
- 2002-fecal culture at 150 days carried calf and clinical suspects.

The testing changed as more knowledge was gained about the prevalence of Johne’s disease in the herd and as the tests themselves changed. As expected with any Johne’s control program, the cull rate increased as the testing was refined. The cull rate started at 2% in 1998 and was at 7.8% in 2002. The high rate in 2002 reflects the increased sensitivity of using fecal culture and aggressive culling that is the current management practice.

There are still some challenges on this farm that will be dealt with as the farm’s financial and human resources allow. Some of the heifer groups are still housed in the freestall barn with the cows in adjacent pens. The alley scraper pulls manure from the cows to the heifers in this situation, further increasing the risk of manure contamination to yearling heifers. This will be alleviated once a facility is built for heifers and only cows fill the current barn. The calves are housed in a greenhouse, but there is the opportunity for manure contamination from the vehicle that is used to transfer the calves to the facility and for feeding the calves in the greenhouse. A dedicated vehicle for the greenhouse would solve this problem.

As time progresses, these challenges will also be conquered. It would be expected that the cull rate for Johne’s disease should really start to decrease in 2004 and that there will be very few early lactation cows that are succumbing to Johne’s disease. It is hoped that freshening heifers would have been born at the time the calving management system changed, and they would have a lower risk of being infected as a calf. As with most Johne’s control programs, Will-O-Crest will make improvements one step at a time.

Veterinary Certification
Kathy Kaufman, NYSCHAP Coordinator

NYSCHAP offers a program for veterinary practitioners to become certified to implement NYSCHAP. The number of farms in the program is quickly exceeding the labor resources offered by our nine state field veterinarians.

The first practitioners to become certified were Drs. Mark Thomas, Peter Ostrum, Patrina Ashley and Kyle Burbank, all of the Countryside Veterinary Clinic in Lowville, NY. The practice has been inexistence since 1934 and works mostly with dairy operations. Fifty seven farms (20%) have been enrolled in NYSCHAP through the practice. Dr. Mark Thomas anticipates that this will increase as herds expand and face greater disease issues.

The veterinarians see benefits for their producers through overall improvement in herd health and profitability. The Countryside vets view the individual modules, such as Johne’s or BLV, as a small piece of the ‘big picture’, which helps the farms improve on their herd plan. They also have found that being certified has helped them have better consulting opportunities on the farms, as well as making them more aware of biosecurity and food safety.

Other certified veterinarians include Drs. Nick Chuff, Craig DeMuth and Dorothee Janssen.
2002 NYSCHAP Activities by the NY Animal Health Diagnostic Lab

Dr. Sue Stehman, NYS Animal Health Diagnostic Laboratory

The AHDL continues to be a full partner in NYSCHAP. In addition to providing herd testing for NYSCHAP, members of the laboratory provide technical expertise for module development, assist in training programs for NYSCHAP certified veterinarians, and industry, provide herd-specific recommendations for test strategy and interpretation, provide computer support for NYSCHAP database development and maintain the NYSCHAP enrolled farm and herd testing databases.

The testing program promotes integrated, farm-specific, herd testing designed to support the management approach used in NYSCHAP. Testing as part of an integrated farm plan, adds value to the testing program on the farm and ultimately at the program level. A summary of testing completed for NYSCHAP herds is provided in the following table.

<table>
<thead>
<tr>
<th>Test</th>
<th>2001 NYSCHAP Testing</th>
<th>2002 NYSCHAP Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Tests¹</td>
<td># Farms²</td>
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<tr>
<td>BLV</td>
<td>6,673</td>
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<tr>
<td>BVDV</td>
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<tr>
<td>Johne's All</td>
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<td>KELA</td>
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</tr>
<tr>
<td>Culture</td>
<td>14,600</td>
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¹ numbers accurate within ~1% error in coding tests as NYSCHAP vs non-NYSCHAP
² most farms test for more than one type of test and may be represented in more than one category
³ % of total laboratory test volume for that test

Efforts were made in 2002 to make the NY Johne’s NYSCHAP module consistent with the USDA Cattle Johne’s Program Standards. A small number of herds in NY (~ 10) have entered the USDA Johne’s Test Negative Status Program. Approximately 160 herds are enrolled in the Johne’s module with management and minimal testing at the participating level. The majority of herds are enrolled at the enhanced level (~ 505) using testing integrated with their Johne’s management plan. While most farms continue to use the KELA (ELISA) blood test as a rapid screening test, farms with low prevalence of infection and those that are culling animals based on Johne’s status increasingly use fecal culture testing. In 2002, the laboratory expanded Johne’s fecal culture capacity to handle the increasing demand for testing.

NYSCHAP herd owners and their attending veterinarians were offered secure internet access to their own herd test results for Johne’s, bovine leukemia virus (BLV), and bovine viral diarrhea (BVDV) testing in addition to routine reporting of results by hard copy. Security features that restrict access to the data by veterinary account or premise ID help to maintain confidentiality of test results. Internet access allows the user to search and view their own results by animal ID, type of test, test result or date of testing to enhance usability of the testing data at the farm level. The queries can be printed or downloaded electronically for use in the farm’s own record keeping system.

There were several specific projects that the extension veterinarians (Drs. Sue Stehman, Belinda Thompson, Daryl Nydam) worked on in 2002 including:

- Development of the bovine leukemia module
- Completion of the expansion module
- Development of a BVD testing discount program
- Continuing education to NYSCHAP veterinarians
- Development of an elective course for veterinary students to begin certification for NYSCHAP
- Initial development of an animal welfare module.

2002 Internet Test Result Use

<table>
<thead>
<tr>
<th>Type of Account</th>
<th>Number of Users</th>
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</thead>
<tbody>
<tr>
<td>Producer</td>
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<td>377</td>
</tr>
<tr>
<td>State Vet</td>
<td>15</td>
<td>153</td>
</tr>
<tr>
<td>Herd Vet</td>
<td>11</td>
<td>65</td>
</tr>
</tbody>
</table>

See the web site at www.nyschap.vet.cornell.edu

NYSCHAP Objectives:

- Increase the herd’s health, productivity, and profitability;
- Assure food safety, public health, and consumer confidence in dairy and beef products;
- Promote environmental stewardship.