



# 2001 NYSCHAP Annual Report

## NYS Cattle Health Assurance Program

### NYSCHAP

#### Objectives:

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

#### Inside this issue:

NYSCHAP Module Development and Veterinary Training	2
Beef Quality Assurance Certification Program	2
Farm Success Story	3
Response to Foot and Mouth Dis-	4
NYS Animal Health Diagnostic Laboratory Efforts	4



### 2001 Director's Comments

*Dr. John Huntley, Division of Animal Industry, NYS Department of Agriculture & Markets*

Welcome to this annual review edition of the NYSCHAP newsletter. There are currently 634 farms participating in the program. We are pleased to report that NYSCHAP continues to evolve to meet producer needs. The introduction of new modules and incentives over the past year is evidence of this process. The Johne's disease, the beef quality assurance and the mastitis modules have been completed. The herd expansion and bovine leukosis modules are in the stages of final editing. Field implementation teams have been trained to introduce these new modules to the producer community.

There is continued support from several sectors of the animal agriculture community to continue the development and expansion of the program. A few of the key participants include the NYS Department of Agriculture and Markets, the New York State College of Veterinary Medicine, Veterinary

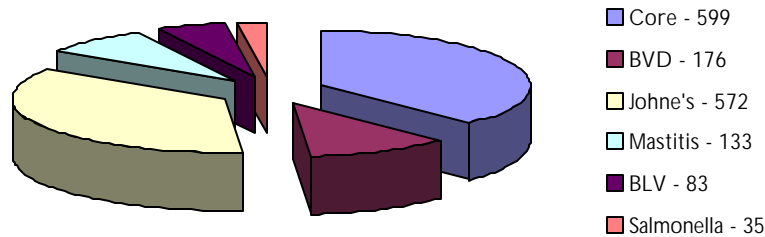
Practitioners, Cornell College of Agriculture and Life Sciences, Cooperative Extension, the New York State Animal Health Diagnostic Laboratory at Cornell, Quality Milk Promotion Service, and private industry. This collaboration and contributions among these key components of agricultural educators, extension, and field implementation teams was, and continues to be, a major goal of the program. We strive to provide the producer with a framework to help address the spectrum of animal health issues on the farm.

As you know, one of the distinguishing features of the NYSCHAP program is the recognition that there is a set of practices that, when employed on the farm, will limit the impact of an infectious agent on the farm. These practices reduce the potential for the introduction of an infectious agent to the farm, amplification within the farm environment, and transportation of the agent beyond the farm

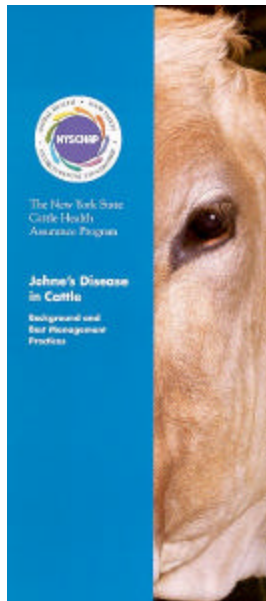
borders. The collective set of these principles constitutes the Core module of the NYSCHAP program and is central to the integrity of the program. Furthermore, these principles are becoming increasingly important, since herd expansions, cattle movement, and the possibility of the intentional introduction of biological agents makes it difficult to anticipate the nature of future threats to cattle health.

The producer, however, remains the primary determinant of the success or failure of the program. I have been impressed, and appreciate the efforts that have been undertaken to achieve animal health goals for individual farms within the state. Just one of these success stories appear in this issue of the NYSCHAP newsletter. I encourage you to continue to evaluate your animal health needs and address high-risk areas on the farm. I congratulate you on your current success and look forward to working with you to meet the challenges that the next year is sure to bring. Please feel free to contact us with any suggestions on how the program can better serve your needs.

Total Number of Modules Fielded as of December 31, 2001



**NYSCHAP materials are available on the web site at <http://nyschap.vet.cornell.edu>**



**The BQA Certification Program is a collaboration amongst Cornell University, NYSCHAP, NY Beef Producers Association, Cornell Cooperative Extension, NY Beef Industry Council and NYS Dept. of Agriculture and Markets**

## NYSCHAP Module Development and Veterinary Training

Module development is a major effort for NYSCHAP. Each module has a myriad of educational materials including on-farm risk assessment tools, veterinary resource materials, industry and producer level fact sheets and Power Point presentations. 2001 saw the completion of several modules, including Johne's disease, mastitis, expansion and beef quality assurance. Much work was completed for the bovine leukosis virus and environmental pathogens modules. All module materials are available on the NYSCHAP web page (<http://nyschap.vet.cornell.edu>). Development teams are a collaborative effort including representatives from the NYS Animal Health Diagnostic Laboratory, Division of Animal Industry, Pro-Dairy and others. The following members contributed to module development in 2001:

**Johne's Disease** - Dr. Chris Rositter and Dr. Sue Stehman (Diagnostic Laboratory), Dr. Charles Elrod (Pro-Dairy), Dr. Pepi Leids (NYS Department of Agriculture and Markets).  
**Mastitis**—Dr. Ynte Schukken and Dr. Frank Welcome (Quality Milk Promotion Ser-

vices), Dr. Bill Stone (Pro-Dairy), Dr. Mark McConnon (NYS Department of Agriculture and Markets)

**BQA**—Kathy Kaufman (NYSCHAP), Dr. Tom Nytych (NYS Department of Agriculture and Markets), Bonnie Bargstedt (Diagnostic Laboratory)

**Environmental Pathogens**—Dr. Sue Stehman, Dr. Pat McDonough and Dr. Sue Wade (Diagnostic Laboratory), Dr. Dwight Bruno, Dr. John Huntley and Dr. Pepi Leids (NYS Department of Agriculture and Markets)

**Bovine leukosis virus**—Dr. Ed Dubovi, Dr. Mike Bruner, Dr. Sue Stehman and Dr. Belinda Thompson (Diagnostic Laboratory), Dr. Dwight Bruno (NYS Department of Agriculture and Markets)

In an effort to increase the labor base for NYSCHAP implementers a veterinary certification program was begun in 2001. The process requires practitioners to attend trainings on various NYSCHAP modules, as well as complete a herd plan for a 'virtual' farm and two real farms. A large effort was put

forth in preparing for and offering trainings for the certification program. Both the Core and Johne's disease module trainings were offered through videoconference at five sites throughout the state. Dr. Pepi Leids and Dr. John Huntley were instrumental in the core training, while Dr. Chris Rositter and Dr. Sue Stehman took the lead for the Johne's training. Approximately 35 practitioners attended these sessions. Additionally trainings were offered in conjunction with the NYS Veterinary Medical Society Annual Meeting. The QMPS Veterinarians (Dr. Ynte Schukken, Dr. Frank Welcome, Dr. Jessica Spatz, Dr. Linda Garrison and Dr. Rueben Gonzalez) prepared for and hosted the mastitis training and Dr. Ed Dubovi lent his expertise in bovine viral diarrhea.

Six practitioners have completed certification and are implementing NYSCHAP on farms. These six include Dr. Mark Thomas, Dr. Trina Ashley, Dr. Kyle Burbank, Dr. Peter Ostrum, Dr. Nicholas Chuff and Dr. Craig DeMuth.

## Beef Quality Assurance Certification Program

For the first time NY cattle producers have the opportunity to participate in a beef quality assurance (BQA) certification program. Funding for the program was provided from the Grow NY Program of the NYS Department of Agriculture and Markets. Through the funding educational materials were created and an educational session was offered at the NY Beef Producers Association Annual Meeting. The three sessions offered included dairy, beef feedlot and beef

cow/calf. Invited speakers included Dr. Dee Griffin (University of Nebraska), Dr. Bill Meis (Future Beef Operations) and Dr. Craig Shultz (USDA-FSIS, Taylor Packing). Other speakers from Cornell University included Dr. Lorin Warnick and Dr. Daryl Nydam.

The certification program includes two levels. Level 1 requires that producers learn challenges and management practices in BQA and success-

fully pass a test on that material. Level 2 requires producers to enroll in NYSCHAP Core and BQA modules. By linking the BQA Certification program with NYSCHAP, cattle producers will have recertification and third-party verification. Although NY's program is slightly different than other states it is stronger because it links BQA with animal health and biosecurity, two issues that are inseparable from the production of quality beef.

## Farm Success Story

*Dr. Pepi F. Leids, NYS Field Veterinarian, NYS Dept. of Agriculture & Markets*

McGarr Farms enrolled in NYSCHAP in January of 2000. The main objective was to institute a written management plan to go along with the Johne's testing program that was already in place. Biosecurity was also a priority and several intervention strategies were recommended and implemented to address this issue as well. The clinical cull rate for Johne's disease has been steady at about 3-4% per year for the past three years. Therefore, this is a herd with a fairly low prevalence of Johne's disease at this time. Except for an occasional purchase of a registered cow or calf and exhibition of some of the cattle at the fair, this has otherwise remained a closed herd.

During the annual review in 2002, it was noted that the clinical cull rate for Johne's was about the same as it was the past year. The testing strategy consisted of blood testing the cows once pregnant and then doing follow up fecal cultures on all cows that tested over 40 on the Elisa blood test. Colostrum is not used from any cow that tests over 40. All fecal

culture positive shedders are culled, whether low, moderate or high. Any suspect cows (sub-clinical or clinical) are also fecal cultured, no matter what their blood test result. Of the 15 cows culled for Johne's disease during the past year, 6 were purchased animals and 9 were homegrown. Only one of those was a first calf heifer; the rest were older cows. It was also noted that six of the culled cows became clinical after calving and had not been detected as a suspect on the Elisa blood test. Those cows were therefore not fecal cultured. They potentially contaminated the calving pen since they were most likely shedding at the time of calving.

Because the Elisa blood test has a lower predictive value in a herd with a low prevalence of Johne's disease, it appeared that this test was not as effective in detecting the likely shedders in this herd. The testing strategy has been changed. Fecal cultures are now taken on all cows at 130 days carried-calf. Results are then known by the time the cow is ready to be dried off. Shedders are

culled before they calve. It is hoped that more shedders (especially low shedders) will be identified with this testing strategy since the fecal culture is more sensitive and the better choice to identify infected cows in a low prevalence herd such as this.

Management is still an integral part of this herd plan. Closer attention will be paid to removing the calves from the calving area more quickly to prevent the possibility of manure ingestion. This management area still presents a possible risk for infection with *M. paratuberculosis*. Goals for McGarr Farms for this year are to decrease the clinical cull rate due to Johne's disease to less than 1% and to prevent the spread of Johne's disease to future generations of cows. Dan McGarr would like to see Johne's disease eliminated from his farm in the not too distant future. He is well on his way to achieving this goal by employing good calving management procedures and using the results of his testing program to help reduce the amount of *M. para* being shed into the environment.



Basic biosecurity is the basis for improving herd health through a NYSCHAP herd plan.

*Dan McGarr would like to see Johne's disease eliminated from his herd in the not too distant future.*

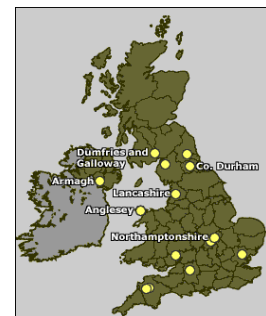
## Response to UK Foot and Mouth Disease Outbreak

In late February of 2001 England declared it's first confirmed case of foot and mouth disease, in what turned out to be a devastating outbreak in that country. The FMD outbreak provided a scare for livestock producers across this nation. NY livestock producers were desperate for information. In a coordinated effort with many agencies the NYSCHAP team was able to meet this need by providing approximately 50 educational meetings

across the state. These meetings saw audiences as large as 200 people. It was definitely a 'teachable' moment as biosecurity became mainstream. Best management practices and the NYSCHAP process were addressed at the meetings that took place around the state. Not only did NY have a biosecurity program in place for producers to take advantage of, but the structure was in place to quickly produce educational materials that were being re-

quested.

One of the great fears that came about during the course of the UK outbreak was county and state fairs. In a very quick time period, NYSCHAP, Pro-Dairy (Debbie Clute) and the Diagnostic Laboratory (Dr. Sue Stehman) produced a notebook entitled '4-H Livestock Educators Animal Health Resource Notebook.' Two copies of these notebooks were sent to every county Extension office.



The foot and mouth disease outbreak in the UK caused many NY cattle producers to implement biosecurity practices.

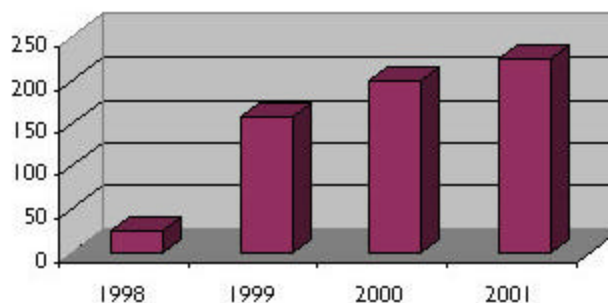
For more information about  
NYSCHAP contact:  
Division of Animal Industry  
518-457-3502  
NYSCHAP Coordinator  
607-255-8202

For testing information contact:  
NYS Animal Health  
Diagnostic Laboratory  
607-253-3900  
Quality Milk Promotion  
Services  
607-255-8202

NYSCHAP is a sponsored program through the NYS Department of Agriculture and Markets, Division of Animal Industry. It is truly a collaborative program and entails involvement from the following people and groups:

- ◆ Division of Animal Industry
- ◆ NYS Animal Health Diagnostic Laboratory
- ◆ Producers
- ◆ Veterinary Practitioners
- ◆ NYS College of Veterinary Medicine at Cornell University
- ◆ Cornell University College of Agriculture and Life Science
- ◆ Pro-Dairy
- ◆ Cornell Cooperative Extension
- ◆ Industry
- ◆ Producer groups
- ◆ Agricultural organizations

Number of Enrolled Herds



## 2001 NYSCHAP Activities through the NYS Animal Health Diagnostic Laboratory (AHDL)

*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 NYSCHAP certified veterinarians, 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.

### *Testing in Support of NYSCHAP:*

The testing program promotes integrated, farm-specific, herd testing designed to support, not replace, 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. Johne's test volume is provided to Dr Huntley at Ag. And Markets in the AHDL monthly report. A summary of testing for NYSCHAP herds in 2001 is provided in the following table. In 2001, the Johne's culture system was changed to a liquid media system to provide a more rapid and sensitive testing method. Test turn-around dropped from 10-12 weeks to 3-7 weeks with the new culture system.

### *Administrative Support:*

NYSCHAP Herd owners and their attending veterinarians

were offered secure internet access to their own herd test results in the NYSCHAP database for Johne's, bovine leukemia virus (BLV), and bovine virus diarrhea virus (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.

Test	2001 NYSCHAP Testing			2000 NYSCHAP Testing		
	# Tests <sup>1</sup>	% of All AHDL NY Testing <sup>2</sup>	# Farms <sup>3</sup>	# Tests <sup>1</sup>	% of All AHDL NY Testing <sup>2</sup>	# Farms
BLV	6,673	49	71	3,795	32	71
BVDV	11,456	47	130	8,136	31	83
Johne's -all	(81,000)	(79)	446	(50,872)	(65)	
KELA	66,406	78		45,118	67	
Culture	14,600	85		5,754	52	

<sup>1</sup> numbers accurate within ~1% error – for coding tests as NYSCHAP vs non-NYSCHAP

<sup>2</sup> % of total laboratory test volume for that specific test

<sup>3</sup> most farms test for more than one type of test - and may be represented in more than one category