



Cattle Health News

A Publication of the New Jersey Department of Agriculture, Division of Animal Health

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Editor's Corner

In this issue, all of the articles discuss great programs which benefit the New Jersey cattle industry. So the theme for this newsletter has turned out to be "Get with the Program!" In keeping with that theme, there are a couple of additional program developments I want to bring to your attention: the **Johne's Control Program** has received funding for free herd **ELISA blood testing**, New Jersey is in the process of forming a **Regional Dairy Quality Management Alliance (RDQMA)**, and the State of New Jersey is no longer recommending **Brucellosis Vaccination**. See **UPDATE** on the back page for important details.

We at the NJ Department of Agriculture encourage you to take advantage of these beneficial programs. Look for updates in future issues of **Cattle Health News**.

A.P.

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Conservation Assistance For Farmers: Cost-Share Programs You Need

Contributed by *Ciro LoPinto, Soil Conservationist, USDA Natural Resources Conservation Service*

All farmers are by nature caretakers of the lands they work, and they know deep down that they must strive to protect the waters that are intimately entwined in the world's landscape – not only for themselves, but for future generations of people who will be fed by future generations of farmers. This is what conservation is all about.

Since 1997, the USDA has had a national cost-sharing program for conservation practices for farmers, the Environmental Quality Incentives

as well as such projects as manure management systems. In fact, it has been mandated that **50% of the combined cost-sharing funds be given to livestock producers** like you! You can sign up year round, but applications received after a specific cutoff date (usually October 15) are always deferred to the next year's application period.

Producers must apply separately for both the federal EQIP and state CCSP to receive the financial assistance of the combined programs. Producers on

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It has been mandated that 50% of the combined cost-sharing funds be given to producers with livestock. That means you!

Program (EQIP). About two years ago, the State Legislature added monies to this program by creating the New Jersey Conservation Cost Share Program (CCSP). Now our two agencies have partnered their programs in order to provide technical, financial and educational assistance to producers regarding conservation practices that address natural resource protection issues.

Cost-sharing rates range from 50% to 90% of the cost of implementing soil and water conservation practices



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DEPARTMENT OF AGRICULTURE

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Conservation Practices Addressed By EQIP and CCSP

The practices generally fall into two basic categories:
Livestock Related and Non-Livestock Related

Livestock Related

Animal Waste Management Systems
Grazing Lands Management
Livestock Yards Management
Stream Corridor Management

Practices include (but not limited to):

- Manure storage structures (90-day minimum storage)
- Concrete feedlots
- Roof runoff management
- Fencing
- Improved variety seedings
- Livestock watering
- Stream crossings
- Exclusion of livestock from stream corridors
- Erosion control
- Nutrient management (proper utilization of stored animal manure on cropland)

All animal waste management and livestock yards management systems must meet recent federal regulations designed to minimize pollutants from livestock operations. (See "EPA Regulations Focus On Livestock Producers Large and Small", page 5.)

Non-Livestock Related

Erosion Control Systems
Integrated Crop Management
Agri-chemical Handling Facilities
Irrigation Systems
Irrigation Water Management Systems
Stream Corridor Management
Vegetative Filter/Riparian Buffer Systems

Practices include (but not limited to):

- Cover cropping
- Waterways
- Terraces
- Diversions
- Crop scouting
- Agronomic consulting
- Chemical mixing/storage areas
- Permanently installed irrigation systems
- Water use monitoring
- Streambank protection
- Filter strip planting

Conservation Assistance... *continued from front page*

rented ground must provide a letter from the landowner that indicates the producer will have use of the land for the entire contract period. Contracts are awarded on a five- to 10 year basis with a maximum award of \$50,000 per applicant. The conservation work must be completed within the guidelines of a USDA Natural Resources Conservation Service (NRCS) Conservation Plan.

There are two basic categories into which eligible conservation practices fall: livestock-related, and non-livestock-related. See box above for details.

To apply for grants under EQIP or CCSP, contact your local USDA Service Center or Soil Conservation District, or the NJDA State Soil Conservation Committee, all listed

below.

After a consultation with a conservation expert, your plan is put on paper. All applications are analyzed at no cost to you by an NRCS staff person, using NRCS environmental risk factors such as proximity to water, soil type, herd size, etc. An NRCS soil conservationist will work with you to determine needed conservation practices, the associated environmental benefit points as they relate to the environmental risk factors and the estimated cost of the project.

Together you will decide which practices to install and how much cost-share assistance you want from the combined federal/state cost-share programs. This information

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is compiled to determine your "Offer Index," a figure derived by dividing the **total requested financial assistance** by the **total environmental points** associated with the practices to be installed.

For example, Farmer A and Farmer B want to fence their cows out of the creek, give them a new source of water, and install a pipeline for their watering source to eliminate stream bank erosion. Both farmers receive 100 environmental points based on these plans.

For our purposes, let's suppose that implementing the plans will cost each farmer \$10,000. Farmer A wants a 50% cost-sharing grant (\$5000) and Farmer B wants a 75% grant (\$7500). Farmer A's offer index would be 50 and Farmer B's offer index would be 75.

In general, the lower the Offer Index, the better your chance of getting the desired grant. In our example, however, Farmer B's chance of getting his requested grant amount would improve if he had more environmental points, for instance 200 instead of 100. The formula would give Farmer B an offer index of 37.5.

NRCS will compile and rank the offer indices from

the application within each geographical priority area. Those with the lowest offer index have the highest rank and will receive grants first. Those applications not selected will be deferred for possible later selection pending availability of funds.

The goal of the combined Cost-Share programs is to award those applicants who have the best cost-benefit ratio. Because EQIP/CCSP are competitive programs, the ranking formula is designed to make the process of selection fair and efficient and enable the program to reach the areas that would most benefit from the application of conservation management systems. Each year the program can be amended to change with the resource needs of specific watersheds, environmental priorities, and producers. The local work group meetings for each priority area are open to the public, and are always factored in when designing each year's program.

For more information contact your local USDA Service Center or Soil Conservation District below, or the NJDA State Soil Conservation Committee (609) 292-5540.

USDA SERVICE CENTERS

Flemington..... (908) 782-4614
 Freehold (732) 462-1079
 Hackettstown (908) 852-2576
 Mt. Holly (609) 267-0811
 Vineland (856) 205-1225
 Woodstown..... (856) 769-2790

SOIL CONSERVATION DISTRICTS

Bergen (201) 261-4407
 Burlington (609) 267-7410
 Camden (856) 767-6299
 Cape-Atlantic (609) 625-3144
 Cumberland (856) 451-2422
 Freehold (732) 446-2300
 Gloucester (856) 589-5250
 Essex, Passaic (973) 364-0786
 Hunterdon (908) 788-1397
 Mercer (609) 586-9603
 Morris (973) 285-2953
 Ocean (609) 971-7002
 Salem (856) 769-1124
 Somerset-Union (908) 526-2701
 Sussex (973) 579-5074
 Warren (908) 852-2579

The Garden State Milk Quality Initiative: Improving Your SCC

Contributed by Dave Lee, Rutgers Cooperative Extension of Salem County

Decreasing SCC Limits

The Garden State Milk Quality Initiative (GSMQI) was initiated in 1995 after USDA's Animal and Plant Health Inspection Service (APHIS) Veterinary Services Centers for Epidemiology and Animal Health issued a report citing high somatic cell counts (SCC) and low production in New Jersey's dairy industry. Present regulations limit SCCs (the amount of white blood cells found in raw milk) to 750,000 cells/ml but more stringent rules decreasing the acceptable SCC level to 500,000 cells/ml are expected in the near future.

Since a high SCC signifies an immune response to a bacterial infection of the udder – mastitis – dairy producers will have to improve their herd management practices to control the quantity and variety of mastitis-causing organisms, in order to meet the decreasing regulatory limits. A variety of different microorganisms can cause mastitis. The organisms can be either contagious (spread from cow-to-cow during milking) or environmental (able to survive in bedding and manure, and on milkers' hands). Mastitis can be **clinical** (i. e., the milk has visible abnormalities such as flakes or clots) or **subclinical** (i.e., there are no visual signs), and both **chronic** or **acute**. The GSMQI focus is on three contagious organisms, *Streptococcus agalactiae*, *Staphylococcus aureus* and *Mycoplasma*.

The GSMQI was designed to aid dairy producers in improving their milk quality, reduce the cost of production and to maximize milk price via quality premiums paid for low SCC. Of New Jersey's approximately

150 dairy farmers, 74 of them currently participate in the GSMQI along with 13 milk haulers and 14 veterinarians.

Sampling and Culturing Services

The GSMQI offers several important services **free** to dairy farmers interested in improving their SCC. For example, dairy producers can request whole herd testing or just have individual cows cultured. In either case, farmers participating in the GSMQI have their bulk milk tested weekly. Personnel from the Rutgers Cooperative Extension (RCE) of Salem County make arrangements for the samples to be collected and shipped and for the bacterial cultures to be performed. Farmers are notified of the results and a monthly microorganism report goes to them and their veterinarians. Frozen samples are also gathered for analysis at two-week intervals from milk haulers who collect and transport the samples to the milk plants. RCE also obtains and tracks the results of tests conducted by producers' cooperatives. **All of these services are conducted at no cost to the dairy farmer.**

Production Loss

Aggregate annual SCC data shows an increase in average SCC from almost 358,000 in 1997 to just over 371,000 last year. Once the SCC is determined, the loss of milk production can also be estimated. The 1998 increase equates to a nearly 7% production loss.

GSMQI Program Participation		
County	# Participating Farms in 1999	# Participating Farms in 2000
Burlington	7	6
Cumberland	2	2
Gloucester	7	7
Hunterdon	3	3
Mercer	2	1
Ocean	2	2
Salem	22	21
Somerset	2	3
Sussex	18	21
Warren	5	6

SCC	% Production Lost
100,000	2.5%
200,000	5%
300,000	6%
400,000	7%
600,000	8%
800,000	9%
1,000,000	10%

Once the production is lost, it cannot be regained during the current lactation even if the pathogens causing the infection are brought under control. If an antibiotic treatment is used to eliminate the infection, the milk produced must be withheld from the bulk tank for a period specified by the treatment labeling. No matter how you look at it, lost production is lost income. On top of lost income, producers must consider the cost of

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EPA Regulations Focus On Livestock Producers Large and Small

Contributed by Linda Peterson, Professional Engineer, USDA, Natural Resources Conservation Service

In March 1999 the United States Environmental Protection Agency (EPA) announced the *Unified National Strategy for Animal Feeding Operations*, regulations that set forth a framework of actions that USDA and EPA plan to take under existing legal and regulatory authority to minimize water pollutants and public health impacts from improperly managed animal waste.

EPA established the regulations because studies have concluded that animal feeding operations (AFOs) are a non-point source of water pollution because of high levels of nitrates, phosphorous, harmful bacteria, and salt found in manure. Runoff that comes in contact with any manure, litter or bedding can pose a health risk to humans and animals, increase the cost of treating drinking water, and may adversely impact recreational resources and the aquatic environment. **As a livestock producer, you must be aware of federal regulations aimed at minimizing pollutants from AFOs.**

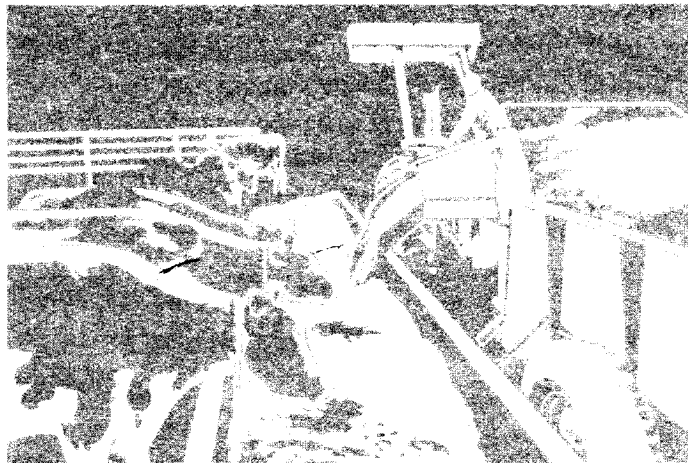
All AFO owners and operators should develop and implement technically sound, economically feasible, and site-specific **comprehensive nutrient management plans** for properly managing animal wastes produced at their facilities. Your operation is considered an AFO if you have a feedlot or concentrated livestock area that meets the following criteria:

- Animals will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period **AND**

- Crops, vegetation, forage growth or post-harvest residues are not sustained during the normal growing season over any part of the facility.

In other words, **an outdoor feedbunk, a sacrifice lot adjacent to a dairy barn, a heavily-stocked paddock with little or no vegetation, or an open concrete barnyard may all be subject to these regulations.**

If you have a large facility, you may be required to store the runoff from concentrated livestock areas in



a waste storage facility. Usually the storage would be in conjunction with a waste management system for all farm waste. Some facilities may require a permit.

Even if you have a small facility, you will eventually have to comply with the EPA regulations. You will have to address several other issues relating to manure management as well. For example, you will have to treat runoff from your lot and address the issue of the “25-year storm,” the **largest storm** that would normally occur during a 25-year period. (Typical of this kind of event was last year’s Tropical Storm Floyd, which was actually categorized as a

“100+ year storm” and resulted in serious flooding and erosion.)

To address the “25-year storm,” solid wastes from AFOs would have to be separated and settled from the runoff. While the solids would be collected and spread with other wastes, the liquids could be treated through a vegetative filter area approximately 2.2 times larger than the concentrated livestock area.

Nearly all livestock operations can be improved by the application of best management practices. Your plan should include the installation

of practices that divert runoff around livestock areas and off roofs, thereby minimizing the amount of water to be treated or stored.

You will have only a few years to come into compliance with the EPA regulations so **there is no time like the present to start to tackle these issues, especially now that there are conservation cost-sharing programs offered by the**

USDA and NJDA that could pay as much as 90% of the costs for your waste management system (see “Conservation Assistance For Farmers: Cost-Share Programs You Need,” this edition).

Look for additional articles on waste storage and waste management systems in upcoming *Cattle Health News* editions.

For more information, call your local NRCS office. You can also get more information about compliance by calling the National Agriculture Compliance Assistance Center at 1-888-663-2155 or by visiting their website at: www.epa.gov/oeca/ug/

FINPACK Helps You Plan Your Financial Future

Contributed by Dan Wunderlich, Rutgers Cooperative Extension of Sussex County

With profit margins extremely tight, producers must have a handle on their financial situation. This is especially important since many creditors are requesting more financial information from agribusiness producers in addition to the usual balance sheet. It's not unusual for a lender to request a cash-flow statement, crop and livestock budgets, and a long-term plan for the projects that occur within an operation.

Producers in New Jersey have the unique opportunity to participate in a voluntary financial management program designed to match their commitment level. Through the Garden State Agricultural Re-Engineering Initiative, this financial analysis and planning program, called **FINPACK**, has been designed to help you understand your financial situation and make informed decisions.

Developed by the Center for Farm Financial Management at the University of Minnesota, **FINPACK** is the most comprehensive farm financial planning and analysis software available. **FINPACK** is not a record keeping system but rather a tool to effectively use your production records to evaluate and analyze your business. By combining your records from previous years with your future production plans and budgets, **FINPACK** makes long-range planning and cash-flow planning easy and meaningful.

FINPACK helps you analyze your current situation (where am I?), your long-range potential or alternatives (where do I want to be?), and the cash-flow implications of moving from where you are now to where you want to be (how can I get there and can I afford it?). Even if you are not planning to make major changes in your operation,

FINPACK provides the tools to evaluate your current operation and shows you how to maximize inputs to achieve the greatest return.

Complete and accurate data on your farming operation is essential if you are to benefit from the **FINPACK** program and is, of course, necessary for applying for a loan. The starting point is an accurate **balance sheet**; the second requirement is an accurate **budget**, or **spending plan** (see below).

If you are exploring ways to make more money from your operation, or considering expansion and diversification, the program is limited only by your input.

For further information on **FINPACK**, contact Dave Lee, Rutgers Cooperative Extension of Salem County at (856) 769-0090, Daniel Wunderlich, Rutgers Cooperative Extension of Sussex County at (973) 579-0985 or your local Rutgers Cooperative Extension office.

FINPACK Requirements

BALANCE SHEET

The starting point is an accurate **balance sheet**, which must contain the following:

1. A realistic value of all **assets**
 - Quantity and market value of all livestock
 - Market value of crops in storage and currently growing
 - Value of all equipment in use and in storage
 - Value of the land and building you own
 - Value of any money currently owed to you
2. A true listing of all **liabilities**, including:
 - All debts and money you owe, which should be categorized into three "debt areas of time": current (less than one year), intermediate (usually three to five years), and long-term (over five years)
 - Interest rates and payment schedules for all debts and money owed
 - Any leases that you have

BUDGET

The second requirement is an accurate **budget**, or **spending plan**, for the production of your crops and livestock products. Budgets are essential for projecting future growth and expansion. Each operation is unique, so these figures should be specific to your farm, and not someone else's averages. Examples of categories in a budget might include the following:

1. Your **actual or projected costs** to establish a crop including:
 - Fertilizer and chemical costs
 - Seed costs
 - Land rent
 - Loans
 - Don't forget this – your time!
2. The **estimated yield and value** of the crops produced

Eliminating Mosquitoes On Your Farm

Mosquitoes can carry West Nile Virus and Eastern Equine Encephalitis – two diseases that may be deadly to horses and humans. Do your part to eliminate breeding grounds for mosquitoes! Wherever water collects (and it doesn't take much) mosquitoes breed. Three of the four stages of the mosquito's life cycle are spent in still water (egg, larval and pupal stages). Anything that will hold water for one week or longer can produce these pests. Some common sites for water collection are:

- Leaky faucets and hoses**
- Rain barrels and buckets**
- Used tires**
- Old bottles and cans**
- Wheelbarrows**
- Water troughs or automatic waterers**
- Tire ruts**
- Clogged rain gutters**
- Ditches**
- Catch basins**

Inspect your premises weekly and overturn any containers that have collected water. Inspect your water troughs and keep them clean from algae and debris. Thoroughly clean waterers at least once a month. Keep farm ditches in good working order: keep them clean so water flows and drains properly, to eliminate standing water. If

you place used tires on silage pits, it is recommended that **tires be sliced in half lengthwise**, (like slicing a bagel) and place those halves inside one another **face-down** on the pits.

For more information, call your County Mosquito Control agency, or visit the NJ Mosquito Control Association website at www.nj.mosquito.org

Mycotoxin Warning!

Livestock producers should be aware of the increased amounts of molds that are recently appearing on their feed stocks. Due to the cool, rainy weather we have been experiencing during the 2000 growing season, these molds have the potential to produce **mycotoxins**. Precautions should be taken by having your grains and forages **tested for these toxins**.

If you are experiencing any abnormal conditions in your livestock such as: going off feed, decreased milk production, reproduction problems such as extended cycles or abortions, unusual behavior, or sudden death, you should get your feeds tested.

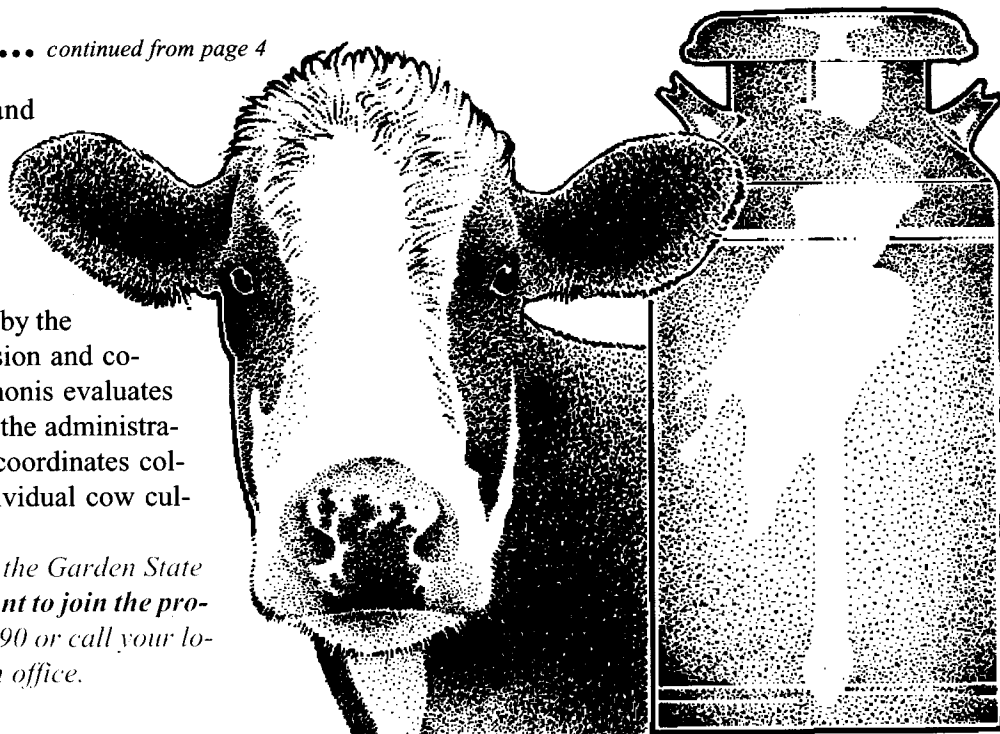
The mycotoxins tested for in New Jersey are: Aflatoxins, and those in the Fusarium class: T-2 (deadly), vomitoxin (DON), zearalenone (reproduction-related), and fumonisin (equine). Call your Rutgers Cooperative Extension agent for more information.

Impact Statement... *continued from page 4*

treatment, both veterinary fees and medication, as well as the increased time required to manage an infected animal so that she is cured and additional animals don't contract mastitis.

The GSMQI is administered by the Salem County Cooperative Extension and coordinated by David Lee. Kim Linonis evaluates the data collected and assists with the administration of the program. Penny Bell coordinates collection of bulk tank vials and individual cow cultures as required.

For more information about the Garden State Milk Quality Initiative, or if you want to join the program, contact Lee at (856) 769-0090 or call your local Rutgers Cooperative Extension office.



UPD

Free Johne's Testing

We have good news for those of you interested in the **Johne's Control Program!** The FY01 state budget includes sufficient funds so that we can offer every New Jersey dairy farmer **one free whole herd ELISA blood test** this year! Any **follow-up fecal tests** for positive ELISAs will also be free. **Call your local Extension Office to sign up for testing and to get actively involved in this program.**

RDQMA Formation

A new program that is coming our way after much talk and action among other states is the formation of a **Regional Dairy Quality Management Alliance (RDQMA)**. The mission of

the RDQMA is to assure a healthful and safe food supply by advocating the adoption of best management practices which promote animal health/welfare, improve profitability of dairy farms, and encourage environmental stewardship. An RDQMA would combine many existing herd health programs under one umbrella, much as was done through the New York State Cattle Health Assurance Program. NJDA supports this kind of program initiative and hopes that producers and their veterinarians will be enthusiastic participants. Clearly, this kind of group will be the way to address all facets of livestock and food production in the future. Watch for more articles on the RDQMA in future newsletters.

Cattle Health News

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UPD

Brucellosis Vaccination Unnecessary

On another front, a program that is rapidly disappearing in this country is the **brucellosis vaccination program**. In the past, your vet would have vaccinated your calves for this disease, but, because brucellosis has been eradicated from most of the United States, and New Jersey has been free of the disease since 1986, **the state will no longer recommend the use of the Rb-51 brucellosis vaccine for New Jersey cattle.** Note that while vaccination is declining, surveillance for brucellosis will continue through market cattle testing and the milk ring test.

Not only is continued vaccination of cattle unnecessary, it is hampering efforts to remove restrictions imposed by the European Union (EU)

and others on cattle exported from the United States. In fact, the EU will not grant United States cattle Brucellosis-Free status until the entire country stops vaccinating for brucellosis for a period of three years, and no new cases are found. Therefore, NJDA will only stock the vaccine in limited quantities for those veterinarians serving herds that will be shipped to states still requiring vaccinations. *If you ship cattle out-of-state, prior to shipment you should check on current regulations, which are changing rapidly, by calling 1-800-545-USDA or visit www.aphis.usda.gov/vs/sregs. For international export requirements, call USDA Veterinary Services at (609) 259-8387.*