Dear Producers,

It may have been a while since you have received an Okeechobee Livestock Newsletter, but hopefully it is a service we will be providing you on a regular basis again now that we are at full staff. In this issue please find information about the following:

1. Florida Cow/Calf Seminar 2001
2. Range Cattle REC, Ona - Cattle and Forage Field Day
3. Hay, Forage and Grazing Tour
4. 2002 Florida Cattlemen's Institute and Allied Trade Show
5. A History of the Kissimmee/Lake Okeechobee Protection and Restoration Project
6. Best Management Practice - For More than Just Water Quality
7. Sustainable Agricultural Research and Education (SARE) Program

Hope there is something useful and of interest for you in this issue.

Sincerely,
Pat Hogue, EA III - Livestock & Pat Miller, EA IV Extension Director

Florida Cow/Calf Seminar 2001

A series of Florida Cow/Calf Seminars has been scheduled for several locations across the state. Please find enclosed the program brochure for these seminars. The last of the series is scheduled here in Okeechobee County, Thursday evening, November 15 at 6:00 p.m. at the Okeechobee Civic Center.

This program is designed to provide producers with a variety of information in the areas of heifer development, bull selection, forage options and age of weaning and effect on cowherd productivity. Dr. Richard Randle, University of Missouri will be discussing "Heifer Development Programs for Small Producers" and although his presentation is directed at small producers, the information will be applicable to large ranchers also. Dr. William Herring will discuss "Bull Selection - Tools for the Trade," and will be addressing all the tools available to producers in making selections. Dr. Rob Kalmbacher will present "Pasture Forage Options for Florida Cattlemen." And, Dr. John Arthington will be discussing some of his recent research as well as others in "Age of Weaning and Effect on Cowherd Productivity."
Range Cattle REC, Ona - Cattle and Forage Field Day

This year's Range Cattle REC at Ona Cattle and Forage Field Day will be held on Thursday, October 11, 2001. Please find included a copy of the program brochure for the days activities including a registration form. Please insure you get the registration form into the Ona REC if you plan to attend, so they can ensure they plan for lunch for everyone.

Hay, Forage and Grazing Tour

The South Florida Beef/Forage will be hosting a Hay, Forage and Grazing Tour on Tuesday and Wednesday, October 30 - 31, 2001 beginning at 9:00 a.m. on the 30th at the Pasco County Extension Office. Please find the program brochure included. The tour will begin at the Pasco County Extension Office and then proceed to Singletary Farms before leaving for Crooked Lake Ranch in Polk County. It will finish the first day at David Shirley's Hay Operation in Venus, south of Lake Placid.

On October 31, the tour will begin meeting at the Ramada Inn, south of Lake Placid before traveling to Buck Island Ranch where we will get an update on the grazing trials and water quality research being conducted there. While at Buck Island we will also look at their new solar powered pump systems into stationary water tanks as potential BMP's. From Buck Island the tour will proceed to Lykes Brothers, Inc. where we will look at some new tropical forage grasses they have in grazing systems. The day will end at Williamson Cattle Company, north of Okeechobee, to look at Dr. Jack Rechigle's phosphorous fertilization plots in perennial grasses. Registration for the forage tour will be $10.00 to cover publications, handbook and lunches for both days.

2002 Florida Cattlemen's Institute and Allied Trade Show

Mark your calendar for the 2002 Florida Cattlemen's Institute and Allied Trade Show scheduled for Thursday, January 17, 2002 at the Kissimmee Valley Agricultural Center in Kissimmee. The theme for this coming year's Institute is "Changing Times; New Expectations" and will include some of the following topics:

- Foot and Mouth Disease - An Eye Witness Account
- Pleasing the Consumer: Preserving Our Way of Life
- Source / Process Verification
- An Overview of Nutrition Management
- Marketing Options: What the Buyer is Looking For

Watch for the program brochure and other announcements in the near future.

A History of the Kissimmee / Lake Okeechobee Protective and Restoration Program

Newsletter Article(s)

According to South Florida Water Management District (SFWMD) reports, phosphorus inputs into Lake Okeechobee nearly tripled during the 1970s and 1980s, resulting in periodic algal blooms that were representative of an upset in the lakes natural balance. The algal blooms sparked public outcry and drew the attention of the Florida Legislature who, in 1987 directed the SFWMD to design and implement a program to
protect the water quality of Lake Okeechobee. The result was the Lake Okeechobee Surface Water Improvement and Management (SWIM) plan.

The SWIM plan specified that phosphorus inputs into the lake needed to be reduced by 40% (136 tons) to meet the targeted loading rate. In an attempt to achieve this goal, several programs were implemented such as the SFWMD's Works of the District Program, the DEP Dairy Rule, the Dairy Buyout Program, and research and monitoring plans. Implementation of these rules resulted in a period of declining phosphorus inputs to the lake, but not by 40% as specified in the SWIM plan. In recent years this positive trend has reversed the loads increased through most of the 1990s. In fact, the latest SWIM plan update states that research and modeling has shown that strict regulatory enforcement on out-of-compliance sites would only result in a 23 ton reduction. For this and other reasons new non-regulatory, incentive-based initiatives have been undertaken, including the Florida Watershed Restoration Act and the Lake Okeechobee Protection Program.

The U. S. Environmental Protection Agency (EPA) is responsible for enforcing the provisions of the federal Clean Water Act of 1972. The act provides the basic framework for pollution control in the nation's water bodies. Sections of the Clean Water Act describe Total Maximum Daily Load (TMDL) allocation and implementation. A TMDL is basically a measure of the amount of pollutant that a water body can absorb and still meet state water quality standards for designated uses, such as drinking water supply and recreation. Up until a couple of years ago, the EPA had not been enforcing this provision of the Act, preferring to rely on other Clean Water Act programs.

In 1998, the Florida Wildlife Federation and others filed suit against EPA to compel Secretary Carol Browner to enforce the TMDL section of the Act. A settlement agreement was reached where EPA directed the Florida Department of Environmental Protection (FDEP) to establish and implement TMDLs for Lake Okeechobee and other impaired water bodies in the state. This process is continuing to date. With EPA mandated TMDLs looming, the 1999 Florida Legislature recognized the need for a comprehensive implementation and funding strategy and, therefore, created the Florida Watershed Restoration Act while addressing the needs and concerns of affected landowners.

The Florida Watershed Restoration Act, which addresses priority water bodies statewide, is unique in many ways. First the law establishes a framework where federally mandated TMDLs can be implemented through an innovative non-regulatory, incentive based program whose agricultural component is to be administered by the Florida Department of Agriculture and Consumer Services. This program is based upon the implementation of Best Management Practices (BMPs), such as those found in the Cow/Calf BMP manual, to achieve desired phosphorus load reductions. As you know, BMPs are generally common sense management practices that most agricultural producers are already employing to one degree or another. Other BMPs can be a little more involved, especially those that are designed for water management, and may require engineering assistance. As noted earlier, the program is non-regulatory but landowners or operators have the option of choosing a regulatory approach by demonstrating compliance with water quality standards through monitoring. Monitoring is probably not the best option due to the high expense involved but, nevertheless, is available to the landowner for consideration.

Another unique and important aspect of the program is that producers who implement and maintain BMPs on their property receive a "presumption of compliance" with state water quality standards. The presumption of compliance provision means that the landowner or operator who has implemented BMPs in good faith is not subject to regulatory action by either FDEP or the South Florida Water Management District for water quality violations. In a case where someone has implemented and maintained BMPs for a reasonable length of time but water quality has not improved, that landowner or operator and the local Department of Agriculture and Consumer Services representative will reevaluate the situation, possibly agreeing to additional BMPs, all the while maintaining the presumption of compliance.
Another incentive to implementing BMPs under the program is that there are funds available for cost sharing. A companion bill to the Florida Watershed Restoration Act provides around $2.5 million per year for ten years to offset the costs of implementation.

Finally, the law addresses all land uses, not just agriculture. Components of the urban program are being developed and will be administered by the FDEP. The urban program will address the retrofit of secondary storm water management systems, homeowner fertilization practices, and septic system tie-in to sewer connections, among other things.

The Lake Okeechobee Protection Program (LOPP), authorized by the 2000 State Legislature, is similar to the Florida Watershed Restoration Act except that this program is Lake Okeechobee watershed-specific. The program strives to coordinate various governmental phosphorus reduction strategies, such as the P-Source Grant process, the Isolated Wetland Restoration initiative and BMP implementation programs as closely as possible. This law also addresses topics not covered in the other statute such as noxious vegetation control and phosphorus contained in lake sediments. The law specifies that BMPs are to be implemented in the same non-regulatory, incentive-based manner as directed in the Florida Watershed Restoration (TMDL) Act, complete with all important presumption of compliance and an even greater level of technical funding assistance.

At this point, a good question might be "So what does all this mean to cow/calf producers in the Lake Okeechobee watershed"? Simply stated, the Florida Department of Agriculture and Consumer Services and others, want to assist landowners and operators in working toward mutually beneficial water quality goals that have been mandated as previously mentioned. The Department of Agriculture and Consumer Services is responsible for administering the agricultural components of the Florida Watershed Restoration (TMDL) Act and the Lake Okeechobee Protection Program through a non-regulatory, incentive-based, cooperative program. The legislation allows the use of interim measures, nutrient management assessments, and verified BMPs as contained in conservation / nutrient management plans, as phosphorus reduction strategies. It should also be noted that the 2001 State Legislature has passed a law guaranteeing that production and financial information provided to the Department of Agriculture and Consumer Services is to remain confidential and is not subject to public distribution. This was done to protect proprietary interests of landowner and operators.

Due to the large number of individually owned parcels in the watershed, a two-pronged approach is planned, with each eventually reaching the same end point. In the first approach, a number of producers, on a space available basis, will be asked to undergo a nutrient management assessment on their property, conducted by a consultant whose services are to be paid for by the Department of Agriculture and Consumer Services but who, in reality, works for the landowner or operator. These assessments will help to identify BMPs that will be included in a subsequently developed conservation / nutrient management plan (the U.S.D.A. Natural Resource Conservation Service will also be involved in conservation planning). Once identified, BMPs can then be implemented with technical and financial assistance provided by the Department of Agriculture and Consumer Services, the Natural Resources Conservation Service and others. Once the verifies BMPs have been implemented, and as long as those BMPs are maintained and proper records are kept, the landowner or operator is presumed to be in compliance with state water quality standards.

The second approach is an interim approach that should be applied prior to performance of a nutrient management assessment and plan development. Since the number of consultants and planners available for this project are limited, all assessments can not be completed as quickly as some would like. Therefore, the interim approach relies on landowners and operators to conduct assessments on their own property as specified in the nutrient management section of the Cow / Calf BMP Manual. For the interim approach, the Department of Agriculture and Consumer Services will ask the landowner to sign a "Letter of Intent" stating willingness to conduct the self assessment, implement the suggested BMPs as indicated in the Cow / Calf BMP Manual, keep appropriate records and, as space becomes available, participate in the nutrient
management assessment and planning process which will likely identify additional BMPs for implementation. This approach, although only an interim measure, provides landowners and operators the same presumption of compliance mentioned earlier. In addition, several of the BMPs identified through this type of assessment may be eligible for cost share.

The end result of the process described above is a nutrient management plan that is tailor-made for an individual piece of property. The plan will be a working document that considers all aspects of agricultural production and water quality management, including off-site influences. The plan is required to be flexible, economically feasible, and user friendly. In fact, consultant produced plans developed under this program will be very similar to those produced by the U.S.D.A. Natural Resources Conservation Service.

The last point to make is probably the most important. The Department of Agriculture and Consumer Services, the UF / IFAS Extension Service, the Natural Resources Conservation Service and the other coordinating agencies urge landowners and operators to take full advantage of this program. Producers are urged to work diligently with the consultants and planners to develop a plan that meets the needs and goals of those who work the land.

Best Management Practices - For More than Just Water Quality

As the use of Best Management Practices, from the Water Quality Best Management Practices for Cow/Calf Operations in Florida manual become a reality in use and incorporation into a total ranch management plan to help producers attain reduced phosphorus loading to satisfy regulatory agencies, it is important to understand that most of these practices are indeed common sense, good sound practices with proven benefits other than just helping achieve water quality standards. Over the course of the next few months we will look at several of their BMP's and what they accomplish for you, some of their history, research and practical results. Many of the practices have extensive histories of proven worth as a good general management practice, but may not have been widely accepted as practical. This issue, we will "rotational grazing."

Rotational grazing implies moving in a circle, and some of the most effective rotational grazing systems are "wagon wheel" designs that have a loafing area with water, minerals and other supplements at the center of a site with the grazing paddocks or pastures as spokes of the wheel design. However, rotational grazing is more simply just moving cattle through a series of pastures or paddocks on either a timed basis or based on the condition of the forage in the pasture or paddock the cattle are currently in.

Rotational grazing probably got its start in Biblical times and was practiced to some extent by the Romans, however, the basic principals of rotational grazing where first written down in 1760. Over history, the merits of rotational grazing versus continuous grazing programs have been questioned and have been utilized sparingly. In the late 70's a spurt of activity occurred to prove rotational grazing programs were not better than continuous grazing. Scientists developed and tested numerous rotational programs involving different lengths of stays, numbers of animals and rest periods. Most studies proved that rotational grazing produced more pounds per acre, but continuous grazing with light to moderate stocking rater produced more per animal.

In continuous grazing systems, cattle tend to graze the same areas of an individual pasture every time they go into it, and while they are in it. This created areas where you have taller growth and areas that are always shorter, but the quality in the shorter growing areas is always higher. So you may get more total production per animal that can be measured, but you get areas not utilized until they are forced to when forage gets short, such as our dry winter, but the quality is lower. In a rotational system, where more cattle are in a smaller grazing area, the forage is grazed more evenly and quality throughout will be more uniform, and you get a result of more pounds of forage produced per acre.
However, in a continuous grazing system, where the cattle will tend to graze the same areas all the time, the forages never get the rest to recover the energy reserves lost with their continuous type grazing. If one reason could be picked in favor of rotational grazing, it would be the rest that is afforded to forages before cattle are allowed to come back to it again. Some other factors favoring rotational grazing are higher utilization of the forages available as has been discussed, generally higher stocking rates due to more pounds produced per acre, the ability to more accurately allocate forage to the grazing animal, better allocation of nutrition available, the ability to time entry into a pasture or paddock based on growth rate and stage of the forage, and favorable changes in animal behavior. Once animals get used to moving through a rotational grazing system, it becomes a matter of simply opening a gate into the next pasture, and closing it behind them. They become docile enough that they will move themselves rather than having to be pushed into the next pasture, and they become easier to handle.

Rotational grazing can provide producers with numerous benefits if they are currently practicing continuous grazing, not the least of which is better utilization of available forage and nutrition.

**Sustainable Agricultural Research and Education (SARE) Program**

The call for proposals for the 2002 Southern SARE Producer Grants has gone out as of September 15. The SARE Producer Grant Program is a competitive grant program for farmers and ranchers to apply for and receive up to $10,000 individually, or up to $15,000 as a producer group, to conduct research, marketing and educational programs. SARE grants can be used for implementing such things as BMP's under a research and education umbrella. They provide opportunities through funding to develop ideas into sustainable practices and technologies, and can be used in conjunction with educational programs such as ours and field days.

What kinds of activities are eligible? On-farm research, farm demonstrations, farmer's workshops and marketing projects. Projects should be innovative, generate results that are useful beyond one year and produce information that many farmers and ranchers can use. And again, can include BMP's and in conjunction with Extension or other agency education efforts.

Completion of an application describing your project, explaining how it will help other producers understand and adopt sustainable agricultural practices is required. Proposals are due in the Southern SARE office in Griffin, GA by January 25, 2002. Dr. Mitch Flinchum, Kissimmee / Lake Okeechobee Protective and Restoration Project Director for IFAS has offered his assistance to any producer wishing to apply for SARE project grants. Dr. Flinchum can be reached through the Okeechobee County Cooperative Extension office, (863) 763-6469. Dr. Flinchum, Pat Miller or Pat Hogue can also provide you with additional information about SARE grants programs or if you have internet access you can go to http://www.griffin.peachnet.edu/sare.

For questions or comments regarding this publication contact Pat Hogue