



# Agri-link

## Upcoming Seminars and workshops

- Small Ruminant Production workshop—April 20, 2006
- Pesticide training/Aquatic Areas—May 25, 2006
- Hurricane Preparedness/Fruit tree workshop—May 31, 2006 (Bokeelia)

Issue 3  
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## Growing Crops for

If you haven't heard of biofuels yet, chances are that the term will be ringing in your ears over the next several months and years. Simply defined, biofuels are produced from animal or plant sources and may be either liquid or gas.

For many years swine and cattle farmers in many States throughout the USA have produced biogas or methane from the waste of their animals. This methane gas is used to heat water or generate electricity, eliminating greenhouse gas emissions that contribute to global warming.

### Ethanol from plants

Recent technological advancement has enabled the conversion of carbohydrate polymers in woody biomass into sugar syrups that can be fermented to ethanol as a replacement for imported petroleum products. Similarly, other plant products such as soybean, peanut, castor bean and switchgrass may be utilized in the production of ethanol biofuel.

By the end of 2005, the U.S. production of fuel ethanol from corn starch exceeded 3 billion gallons per year, representing 2 percent of total U.S. automotive fuel.

### Biodiesel

In addition to ethanol fuel from plants, other crops, (example Physic Nut) have been exploited to produce another type of fuel called bio-diesel. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend. It can also be used in diesel engines with no major modifications. Because it originates from a plant source, biodiesel is biodegradable, nontoxic, and essentially free of sulfur and aromatics.

### Environmental Benefits

In 2000, biodiesel became the only alternative fuel in the country to have successfully completed the EPA-required Tier I and Tier II health effects testing under the Clean Air Act. These independent tests conclusively

demonstrated biodiesel's significant reduction of virtually all regulated emissions, and showed biodiesel does not pose a threat to human health.

### Where Florida Stands

The State of Florida ranks fifth nationally in energy consumed per capita, third in total energy consumption, but a clear first in biomass production. With the raw materials abundantly available, our state is poised to becoming a leader in biofuel production. Biofuel production from woody biomass and crops will stimulate the economy, reduce the dependency on imported fuels, and most of all rewrite the relevance of agriculture in post-modern development.



FROM THE AGENT'S DESK...



Roy Beckford—Ag & Natural Resources Agent

Hello again friend,

I take pleasure in presenting another issue of Agrilink to you.

There are dozens of newsletters and magazines which offer information on agriculture and natural resources being circulated throughout the State of Florida. I firmly believe, however, that Agrilink is providing information which is pertinent to Lee County, and relevant to small farming enterprisers and to others with interests in our local resources.

Your suggestions are welcome and are highly regarded. Enjoy the issue, and remember to take part in the efforts to care for our County's precious resources.

Sincerely, Roy.

Producing Meat Goats in Lee County

As the human population continues to grow and certain ethnic groups increase in numbers in Lee County, there will be an ever increasing demand for goat meat. According to the 2002 Census of Agriculture, goats are among the fastest growing sectors of the livestock industry in the United States.



Betty Henderson's farm, NFM

From a total of 420,000 meat goats in 1987, the number reached 2.83 million in January 2006. This is an increase of 500 percent over 19 years. However, despite this growth in numbers, supply has not kept up with demand.

When compared with cattle, goats require less landspace, they reach market age quicker, and capital required for startup is much lower. Goats can be raised on tracts between 2 and 5 acres, with preferably 10 goats per acre for proper pas-

-ture rotation.

There are several differences between goats which are raised for meat and those raised to produce milk. Ideally, a meat goat has shorter thicker bones in relation to its amount of flesh, and it looks smoother and less angular than the dairy goat. In females meat goats, the udder and teats may be smaller, but she should still be able to produce enough milk to

From a total of 420,000 meat goats in 1987, the number reached 2.83 million heads in January 2006.

to sustain her twin kids after they are born.

Many people believe that goats will eat anything from newspapers to rusty tin cans. Like all other animals, when goats are hungry they will chew on almost anything, but they need quality forage in order to be healthy and selective in the things they eat.

Good forages should provide the basis for any feeding program. With a good feeding program, the health of meat goat herds will remain intact. It is important for farmers to attend training seminars and workshops to improve their skills and abilities in disease prevention, diagnosis of certain illnesses and first aid treatment of common conditions. It is always advisable to establish a relationship with a veterinarian who practices with farm animals and have him or her on call should there be any problems above the ability of the farmer.

With proper management and no production mishaps, a herd of 18 Does and 1 Buck could produce an average total of 36 kids each year. Assuming that culling and replacement are done evenly, and with an expected price of \$100 to \$120 per market animal, gross returns could be as high as \$4,320 per year.

Farmers' Safety Box

Using Pesticides safely



Read the pesticide label !!!

Follow the suggested PPE (Personal Protective Equipment) indicated on the Pesticide label and labeling. This details the type of protective gear and clothing required to use the pesticide safely.

Keep index cards with the brand name and active ingredient of the pesticide, to present to an emergency room in the event of an accidental ingestion, eye or skin contact.

Producing for Niche Markets

For small farmers to become competitive in today's global marketplace, they need to be integrated into the chain of production—from the farm to the grocer's shelf. This requires more than just farming skills, but an additional ability to find markets and be able to meet the demands of those markets once sale agreements have been finalized. Opportunities exist for small enterprises to make a fair living by producing for niche markets such as the

cultivation of mini-vegetables, which are becoming more popular with luxury shops and the catering industry.



Mini-Chinese Cabbage

Products generated from organic agriculture or Integrated Agriculture are also sought after as they offer a

better solution for consumer requirement in terms of food safety.

Producing items strictly to satisfy the tastes of ethnic groups is another niche area worth exploiting. Several shops are also opening up across Southwest Florida, catering to the tastes of dieters and to people with very selective food needs due to health and allergy problems.

Identifying the niche is the first step. Taking advantage of lucrative opportunities is

## Understanding Wild Hogs

In the year 1539, Hernando DeSoto arrived in Southwest Florida with a small herd of hogs. Since that year, populations have grown despite the animal being a favorite for hunters. The estimated number of hogs currently in the State of Florida is five hundred thousand. Present in all 67 Counties, Wild hogs occur throughout Florida in various habitats, but prefer moist forests, swamps, and pine flatwoods. They are omnivorous and feed by rooting with

their broad snouts, causing great damage of the understorey and leaving an area looking like a plowed field. This type of damage may be disastrous on urban landscapes or on farmland. In addition to this destructive behavior, wild hogs have been known to take injured wildlife, and have also been implicated in the damage to turtle nesting areas.

Wild hogs may weigh over 150 pounds, and be 5-6 feet long. They travel in herds



Photo by Jim Cawthard

containing several females and their offspring. In Florida they are known to have 45 different parasitic and infectious diseases, eight of which can infect humans.

In most of Florida, wild hogs are considered domestic livestock. This means they are

the property of the landowner upon whose land they occur. With landowner permission, there is no closed season, bag limit, or size limit for wild hogs where they are considered domestic livestock.

Exclusion of wild hogs is not largely possible. Nuisance hogs may be trapped using pens with trap doors and baited with corn. Trapped animals should not be released on public land, and only on private land with the landowners permission.

## Tackling The Problem of Invasive Plants - Tropical Soda Apple



Tropical Soda Apple

Compared to many other invasive plants that have become problematic in Florida, the Tropical Soda Apple (TSA) is a relatively recent arrival. The plant is native to Argentina and Brazil and is widely believed to have been introduced to Florida in the 1980's.

Resembling Horsenettle,

TSA has been observed as a weed particularly in pastures and rangeland, but may also be found on ditch banks, in citrus groves, sugar cane and vegetable fields, along roadsides, and in nature preserves.

The problem with TSA is that it produces a large number of viable seeds, up to 50,000 per plant. Livestock and wildlife such as wild hogs, deer, and raccoons eat the fruit and disperse the seed via feces, spreading the plant to other land areas where they germinate

and spread quickly. If allowed to become dense stands, TSA becomes difficult to control and control measures may be time consuming and expensive. Rotational grazing management of livestock will also have to improve, as TSA seeds can remain viable in the digestive tract for up to six days.

To tackle the problem of TSA infestation, it is recommended that dense stands be mowed to 3-inch stubbles to prevent the plants from seeding. Mowing should be

repeated when the plant reaches flowering stage, followed by a broadcast application of the herbicide **Remedy**.

To control invasiveness on pastureland, ranchers should hold purchased cattle for up to six days to allow ingested TSA seeds to pass through the gut of the animals. Biological control methods against TSA is proving to be successful, even as more measures are being developed to stem the spread of this invasive plant species in Florida.

## Stormwater Ponds

Developers have made them quite beautiful, and many are breathtaking to look at. In fact, many home buyers



pay higher prices to have a lake view. The stark reality though, is that most of these

water bodies are storage ponds for stormwater, a very vital solution to the environmental changes shaped by progress in Florida.

Another name for a pond that holds water throughout the year is 'wet detention pond'. They are constructed in such a way that the pond bottom is below the 'seasonal high water table' (SHWT).

As land use changes more

toward urbanization, concrete surfaces, soil compaction, filling up of existing depressions, all result in more rain water runoff and a reduction in storage capacity. At the same time, introduction of pollutants aid the degradation of stormwater quality.

Stormwater ponds are designed to mitigate these changes by providing storage, attenuating peak discharge rates, and improving water

quality.

When stormwater ponds are maintained in such a way as to decrease the entry of pollutants from our Florida yards, and by ensuring the growth and health of shoreline plants, native species of birds and other animals will have a place to make their homes and feeding grounds. A lake view is even more spectacular when there are water birds to see.



**FARM JOKES**



It takes two !!



There was a farmer who raised watermelons. He was doing pretty well but he was disturbed by some local kids who would sneak into his watermelon patch at night and eat watermelons. After some careful thought he came up with a clever idea that he thought would scare the kids away for sure. So he made up a sign and posted it in the field.

The next day the kids showed up and they saw this sign which read, "Warning, one of the watermelons in this field has been injected with cyanide poison." The kids ran off, made up their own sign and posted it next to the sign that the farmer made. The farmer showed up the next day and when he looked over the field he noticed that no watermelons were missing but there was a new sign next to his. He drove up to the sign which read, "Now there are two."

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**Tid-bit News On Agricultural Science**

**Vultures dying in India**

Millions of long-billed, slender-billed and oriental white-backed vultures have died in India after eating cattle carcasses tainted with the human drug **Diclofenac**, an anti-inflammatory and pain-killer given to sick cows. During the rainy season, cattle in South Asia suffer from an insect transmitted viral disease known as "Three Day Stiff Sickness". A common anti-inflammatory used in livestock is unavailable in India so farmers have turned to an alternative made for human treatments.

Vultures play a very vital role in disposing of carcasses, keeping down populations of stray dogs and rats that also feed on dead cattle and can spread diseases among hu-

mans. The Indian government has refused to ban Diclofenac until a viable alternative is found, because cattle are crucial to the country's rural economy.

*(From Associated press)*

**Grandfather's advice may help thwart mosquitoes**

Scientist, Charles T. Bryson, was told by his grandfather years ago that fresh, crushed leaves of American beautyberry, *Callicarpa americana*, helped keep biting insects away from draft animals such as horses and mules. Charles passed on the information to a chemist who tested the plant and found out that it contained an insect repellent compound called calli-carpenal.

Tests have since shown that the compound is as effective



**Impact Statement**

When Chris Barnes and her husband decided to produce vegetables in a box bed for the benefit of the kids in her childcare facility, she was re-connecting with her 'roots' in many ways. Her father, now retired from the activity, is one of the County's older farmers. Chris, though, is a great cook, but she had to be coaxed a bit to eat the first grape tomato that appeared on one of her vines. She does not have to be coaxed however, to show off her backyard plot to her neighbors and to the parents and guardians of the children who attend her childcare. Consequently, backyard box bed vegetable production is catching on in the New York Avenue area of Fort Myers where Chris lives. The Lee County Extension Service is pleased to be working with Chris Barnes. Surely, she inspires her kids, and her actions are beginning to inspire an entire community to grow and eat healthy.

*Getting the kids involved*



*Chris (in yellow), showing off her green garden*



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