

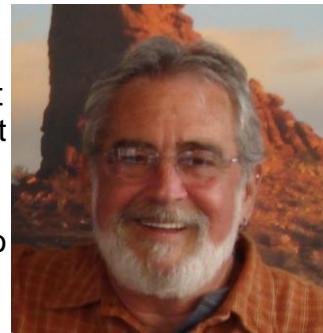
Floribbean Rangelands

Society for Range Management, Florida Section Newsletter

Spring 2009

A Slightly Different Perspective

Well.....I didn't get much of a response from my request for input on how we could boost our membership. The only idea thrown out was by one of our council members, Chad Ellis. His idea was to co-sponsor with the Florida Grazing Land Coalition (FGLC) a Florida Private Landowner Stewardship Award. Florida is home to some of the best land managers in the country. Most leave a portion of their land in its natural condition. There are many reasons for doing this, but I'm sure one dates back to when all of the land was still in its natural condition, and that is; "it provided us with a living".



Working for The Nature Conservancy for so many years, I have seen many land parcels change hands. Nearly all that land was agricultural working land. Where else would we find it? Why do you think there was so much raw land available in a state that gave away most of its sovereign land to entice people to move here? The people who moved onto that cheap/free land lived off it by hunting, growing crops, or grazing livestock. It wasn't until the last 60 or so years that pastures were tamed or that fences were even required. So much of that working land was left in its natural condition because it provided a living like that. Along comes TNC, looking to buy natural land in good condition, and viola!

Oops! I must have wandered off. I was talking about what great stewards Florida livestock folk are. Part of it is they just love their piece of land and the lifestyle it affords. I think recognizing great work is a good idea. This would give us a chance to showcase some of our members, and maybe entice new membership, if for no other reason than the chance to be recognized as a great steward of the land.

SRM has a nationwide competition for Private Lands Stewardship. Each state can provide a poster presentation of their state winner(s) and they then compete on a national level. Last year The FGLC and NRCS presented three posters at the National SRM Meeting to help promote Florida producers and stewardship. Unfortunately they lost out to a producer from one of the western states. There's incentive right there. Florida SRM should pursue a partnership with FGLC to sponsor a Florida Stewardship Award, and do it pretty soon so we can get into the National competition.

This sounds like a good topic to discuss at the business meeting after the Spring Tour (See my other article in this newsletter).

One last thought. Some of the state finally got some rain in the last few weeks. Too much in places. But for central and south Florida the drought rages on. I mention this because of the fire danger in this part of the state. I've been messing with fire my whole adult life, sometimes even legally (kidding), and I don't remember fires behaving like fires have been this year. There have been extended droughts in the past, and they made wildfires and prescribed fires behave in strange and abnormal ways. But this year, after extended droughts back to back with very little relief (the hurricane years (2004 and 2005), fire is really acting abnormally. Up near St. Augustine recently a prescribed burn escaped into fuel that had been burned just three months previously. Muck soils are burning with open flame when normally they either won't burn at all or burn as a smolder.

I mention this as a caution, since there doesn't seem to be much relief until July, be very careful with fire outside. We are short enough of members!

Bob Nelson, President FL Section SRM,

Florida SRM 2009 Spring Tour

The 2009 SRM Spring Tour will be on Tuesday, May 26 at The Nature Conservancy's Disney Wilderness Preserve (TNC-DWP) south of Kissimmee starting at 9:30 AM. **Participants will be limited to 22 because of buggy capacity, so please pre-register using the form below.** We plan to have a short presentation by me (Bob Nelson) about the preserve and where it stands in its mitigation mission. After the presentation we will load up in our large off-road buggy for a tour of the preserve. Box lunches (included in the registration fee) will be available to those who pre-register. Upon completion of the field tour we will have our business meeting. We should be finished by 5:00 PM.

About the Disney Wilderness Preserve

The DWP project is dedicated to the protection, restoration, and maintenance of an 11,866 ± acre natural area in central Florida, which includes a center for ecological research and training in the areas of ecosystem management, natural habitat restoration, and endangered species conservation.

Owned and managed by TNC, the preserve encompasses several different habitat types, including blackwater streams, flatwoods, scrubby areas and approximately 4,000 acres of wetlands. It is home to hundreds of species of native plants and animals.

Before becoming a TNC preserve, this was working land where turpentine extraction, logging, ditching and grazing dramatically changed the landscape and reduced its wetlands. By the late 1980s the land was substantially altered and being considered for urban development, including a marina. Discussions of how best to protect this piece of Florida wilderness led to a new approach to conservation. The Walt Disney Company, and later the Greater Orlando Aviation Authority, joined with the environmental community and state agencies to create the first large-scale, off-site restoration project of its kind. Traditionally, wetland mitigation was done at the actual site of the impact by creating new wetlands. The partners who came together to create DWP instead chose to pool resources to protect the land and restore wetlands at a former cattle ranch instead of making new wetlands where none existed before.

Upon taking ownership of the land in 1992, TNC began a 20-year project to repair wetlands, restore fire and remove invasive species from the preserve. More than 25,000 acres have been

burned at DWP since 1994. Most units have burned twice since 2002. The restoration and enhancement of wetlands at DWP is approximately 95% complete with only one project still in the "active" phase. Our monitoring data show that water flow and retention are restored in most cases, and where we couldn't affect the hydrology we restored the ground cover.

Large ground cover restoration projects improve habitat for gopher tortoises, Sherman fox squirrels, and other wildlife. Converting tamed pasture back to native grasses draws flocks of migrating birds and creates new pine savannahs. Restored habitat enables plants and animals not seen for decades to return to the preserve.

Realizing the opportunity to use the preserve as a place of learning, the Conservancy opened the Conservation Learning Center in 1999. Pre-arranged tours, conservation forums, environmental workshops and other activities provide an opportunity for participants to experience firsthand the Conservancy's innovative methods of habitat restoration and land management.

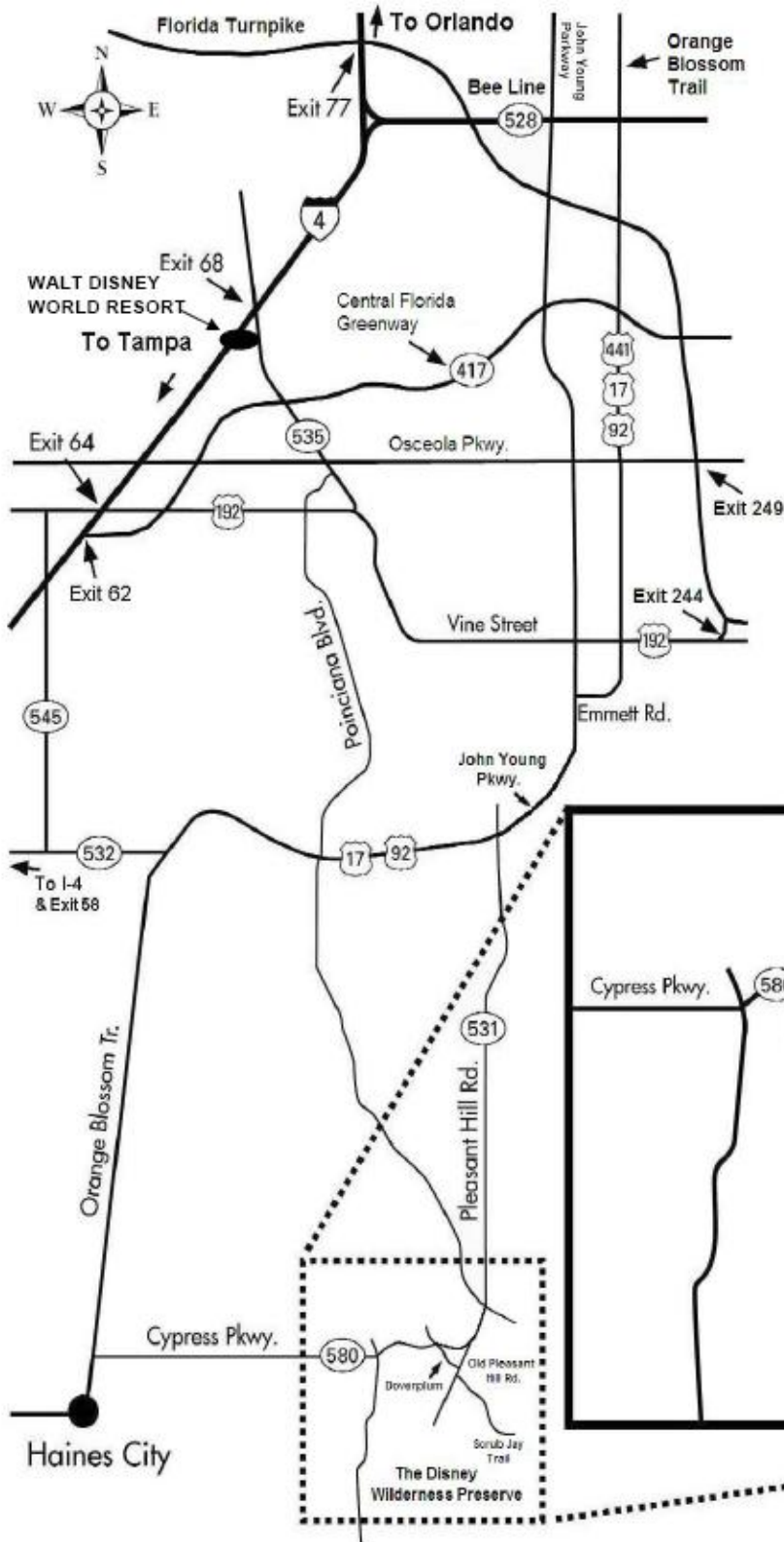
The Conservation Learning Center was built using the principles of sustainable building. It uses a lot less energy than a building of comparable size, incorporates materials that are made largely from recyclable products, and all wood used in the building came from a sustainable source. Graduate students, university faculty members, researchers, and state and federal agencies visit the preserve as part of their scientific and educational programs. In 2008, the Conservancy entered into a memorandum of understanding with the University of Central Florida. The intent of this agreement is to facilitate education and research on important conservation topics and provide conservation practitioners with adaptive management strategies that effectively abate the threats of climate change, urbanization, altered fire regimes, invasive species and ensure the sustainability and resiliency of conservation lands.

I look forward to sharing my impressions of this project with you, so please join me on Tuesday, May 26 for the 2009 Spring Tour.

Bob Nelson

Florida Section - Society for Range Management			
2009 Spring Tour at TNC's Disney Wilderness Preserve			
Tuesday, May 26 – 9:30 AM to 3:00 PM			
Pre-registration Form			
(Check appropriate box)			
	SRM Member		Non-SRM Member
DWP Tour	<input type="checkbox"/>	\$15.00	<input type="checkbox"/> \$20.00
Please Specify: Vegetarian		Non Vegetarian	
<input type="checkbox"/>		<input type="checkbox"/>	
Name:		Affiliation:	
Address:			
Phone:		e-mail:	

Please fill out the form above and mail with a check to:
 Attention: Pam Speelman
 The Disney Wilderness Preserve
 2700 Scrub Jay Trail
 Kissimmee, FL 34759



**Directions to:
The Disney
Wilderness Preserve**



SAVING THE LAST GREAT PLACES ON EARTH

**2700 Scrub Jay Trail
Kissimmee, FL 34759**

**Phone: (407) 935-0002
Fax: (407) 935-0005**

(Map not to scale)

Livestock Grazing at Avon Park Air Force Range, Florida A Synopsis of Rangeland Management 1859 to Present-day

Avon Park Air Force Range is located about 60 miles south of Orlando in central Florida. The installation consists of 106,000 acres of which 89,478 acres are out leased for livestock grazing. The Range is divided into eight leases that range in size from 434 to 22,590 acres. The major forage producing vegetation types are South Florida Flatwoods, Cutthroat seep, slough, freshwater marsh, and improved pasture. The primary native forage species are creeping bluestem, chalky bluestem, lopsided indiagrass, maidencane and cutthroat grass, with bahia used in the improved pastures. Forage production ranges from 4,000 to 10,000 pounds per acre.

There is a long history of cattle grazing in Florida. Cattle were introduced in Florida by Ponce de Leon in 1520 and Hernando de Soto in 1539. The Native Americans, the harsh environment, and the lack of access kept most European settlers and their livestock near the coasts or north of Florida for the next 300 years. The earliest recorded European settlement in the area of Avon Park Air Force Range, bombing range, occurred in 1859 when William Willingham moved his "homestead" and his 15,000 head herd to Lake Arbuckle area. Most early ranching operation established small homesteads where they built a house, working pens and other improvements but grazed their cattle on "public lands". Even though a homestead was established no lands were patented until 1884-1895 when most of what became the bombing range was patented by Atlantic and Gulf Coast canal and Okeechobee Land Company, and Florida Land and Improvement Company in payment for dredging and "reclaiming" the swamp lands. These large land holders leased the grazing rights to the livestock operators already on the land, while they extracted turpentine and timber. This period (1859 – 1942) became known as the cracker period.

Tick fever took its toll on the traditional ranching way of life and on the livestock industry in general following the Civil War. Most of Florida's cattle were quarantined following the Civil War until the 1930's. To combat the problem the government developed a systematic dipping schedule that required all cattle to be dipped every two weeks in an arsenic solution. A typical 2,000 gallon tank was filled with a solution of:

- 32 pounds of white arsenic
- 96 pounds of washing soda
- 4 gallons of pine tar
- 2000 gallons of water.

Cattle were driven into the vats one at a time and swam to the other end where they walked out on an incline onto a dripping pad/pen. When dry they were allowed to return to the range to graze. The procedure was repeated every two weeks until no ticks were found. The last quarantine in Florida was lifted in 1950.

The start of WWII brought a change to the land use. In January 1942 the land was purchased by the federal government and construction of the military facility was started. On March 31, 1942 bombers from Mac Dill Field, Tampa, Florida started dropping bombs on targets in the newly constructed bombing and gunnery range. Livestock was removed during the war. At the end of the war military use of the range declined and legal livestock grazing returned in 1958.

Livestock management post war was similar to what it was before the war: the operators stocked as heavy as they could, grazed as much as they could, and invested as little as they could. The ranchers learned early on that they could get a short term gain in cattle performance following a burn, so they would light the range on fire as often as they could. This uncontrolled burning coupled with uncontrolled grazing had depleted the range to such a point that when the SCS (Soil Conservation Service) inventoried the installation in 1975 100 percent of the range was in poor or very poor condition. Cattle performance was also poor and profits were down. The



Bombing Target

livestock industry on Avon Park Air Force Range was on life support.

Burning of the vegetation became the Air Force's responsibility in the mid 1970's. Like most reactionary change it goes too far the other way, early controlled burning was on a three to five year rotation and only occurred during the non-growing season. Burning is required maintain the vegetation, this non-growing season and long rotation allowed the saw-palmetto and oak brush to take over. We have learned that lighting season fire, on a two to three rotation is the most effective in maintaining or improving the vegetation.

The SCS, and the Range Departments from University of Florida and Texas A&M teamed together with the bombing range to develop a grazing plan that would reverse the free fall in the range condition. Because very little was known about managing subtropical native range they were "plowing new ground". Without any scientific research to base their plans on they devised three systems to try: one unit was divided in two pastures and would follow a switch back, six units would follow a three pasture system and one would do a rapid rotation system (one week per pasture). The first year revealed that the two pasture switch back and three pasture systems were not working. The periods were still too long. The rapid rotation system saw almost unbelievable recovery, going from poor or very poor to good in just one year and "new" grass species being discovered (we now have 28 species of bluestems). However, livestock performance was still poor. So now the question was not what worked but how to apply it to the rest of the bombing range?



Andropogon stolonifer

Like most good range professionals they were good at monitoring. The first item to determine was what was the primary forage species? From fecal analysis and good plant identification of the actual plants grazed, they determined that creeping bluestem was the primary forage even though it was very low in abundance. Armed with this information they tried to determine the proper utilization level for the species. They used stubble height as an indicator of utilization. Their research showed that six inch stubble height is the minimum for maximum production. If they allowed the forage to be grazed to about four inches the grass would re-grow but very slowly. If grazed to between two and four inches it would not re-grow that growing season. If it was grazed to less than two inches it was done (no re-growth) for up to two growing seasons. We now knew the utilization level necessary to maintain range health, but livestock performance was still poor. There seemed to be a nutrition problem with the native forage. We could easily measure the stable height with a yard stick to insure good range condition, however how do we get at the nutrition issue? They clipped the vegetation and had TDN (total digestible nutrients) analysis ran, but this did not help much at first

because it showed very low levels for the mature plants. They tied the TDN analysis to plants that had been clipped and allowed to re-grow to various heights. What they found was that if the grass was cropped to eight inches and allowed to re-grow to fifteen to eighteen inches both its production and quality was maximized. (*Andropogon stolonifer* graphic from Hitchcock, A.S. (rev. A. Chase). 1950. *Manual of the grasses of the United States*. USDA Miscellaneous Publication No. 200. Washington, DC. 1950.)

We now knew both the pre and post grazing height for our key forage species.

With this information we could now develop a rotation system that would meet the ecological needs of the vegetation and maximize livestock production. Whatever system that was developed had to be practical to implement (cost of structural improvements) and cost effective for the rancher to follow. Through much trial and error a basic system was worked out that allow short enough grazing periods not to overgraze the forage and long enough to allow recovery without over resting. We now graze each pasture for about two to three weeks and rest it for about six to eight weeks, during the growing season. Moving every week required too many fences and was too expensive for the ranchers, moving less often that two to three

weeks resulted in overgrazing. To be able to schedule rest/grazing periods required construction of fences (244 miles) to divide the large pastures into smaller ones. Most units have five to six pastures. To work cattle requires each unit to have a set of working pens. To pay for all this construction the Air Force allowed the bombing range to utilize the revenues received from the grazing leases to be reinvested in the bombing range. My program is totally self supporting; we get no tax payers money to operate on, I must make a profit or I don't get paid, the improvements don't get repaired, and my truck doesn't get repaired or replaced and I have no gas to operate with.

Clarence Morgan

George Tanner Retires from UF

Be it officially known that George Tanner has retired (30 years of service) from the Department of Wildlife Ecology and Conservation, University of Florida, effective Feb. 2nd 2009.

Good job George.

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Links about Rangelands

http://www.cnr.uidaho.edu/what-is-range/Rangelands_Defined.htm

Conservation... Our Purpose. Our Passion.

<http://www.nrcs.usda.gov/feature/ourpurpose/>

Grazing Lands Conservation Initiative (GLCI) <http://www.glci.org>

The Fourth National Conference on Grazing Lands (4NCGL) is being planned by the national Grazing Land Conservation Initiative steering committee for December 2009.

The conference objective is "To Heighten Awareness of the Economic and Environmental Benefits of Grazing Lands," and its theme is "Grazing Lands – A Winning Hand," – in keeping with the Reno-Sparks location where the conference will be held Dec. 13-16, 2009 a John Ascuaga's Nugget Hotel Casino.

Notes from the Editor

The next issue of the FL Section SRM newsletter is "scheduled" to come out in July, date to be determined. We welcome all articles concerning rangeland issues from members or non members. **Thank You** to all who helped with this issue.

Please feel free to pass the link or this newsletter on to those you might think interested.