VOLUME: XI
ISSUE: SPRING
2016

Florida Association of
FANREP
Natural Resource Extension Professionals

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http:// anrep.ifas.ufl.edu/

MESSAGE FROM FANREP PRESIDENT!

Greetings fellow colleagues of FANREP.

Again I'm very honored to speak to you in my role of FANREP President. While 2016 sure seems to me to have been moving entirely too quickly, I know that all of us have been very hard at work in conducting our Extension programs and serving our communities and supporting our colleagues. The articles in this issue of our newsletter surely attest to the successes of our efforts and I hope that all of us take the time to learn from them.

In terms of important events on the horizon for FANREP, our upcoming June annual meeting of ANREP takes center stage. As a reminder, it is a joint meeting with the National Association of Community Development Extension Professionals (NACDEP) in Burlington, VT. The theme of the conference is 'Building A Path To Resiliency'. Based on the program described on the conference website, this conference promises to be of the highest quality for learning to even better serve our communities. And the fact that it's taking place in Burlington, VT, is just icing on the cake for me. I hope that quite a few of us can attend it.

Registration is open now for it. The FANREP Board is now planning a FL states night out while we are there and will be providing more information about it to you soon.

Following up my message in our last newsletter, I encourage you to let me know how I can bring about some positive change for FANREP when I take my turn as president of 2017 EPAF. For example, I have spearheaded a little change already by requesting at the 2016 EPAF that themes be given to the abstract sections in order to improve the cohesion of selected presentations.

Finally, I want to report on my recent participation with our Vice President, Alicia Bradigan-Betancourt, as well as the leadership of all our sister Extension professional societies, at the 2016 Public Issues Leadership Development Conference (PILD) in Washington, D.C. with financial support by Dr. Nick Place. This national conference allowed us to network with Extension colleagues across the nation and learned from diverse presentations focused on the theme of 'Innovation: The Story of Extension'. In addition, we participated with our FL Extension colleagues in visiting the offices of our elected officials on the Hill to talk about the value of Extension to our communities and the need to protect its funding structure at the national level.

In closing, again I encourage you to communicate to me and your FANREP Board members on how we can make FANREP better serve you, your Extension programs, and your career.

Robert Kluson, **FANREP President**

UF UNIVERSITY of FLORIDA
IFAS Extension

How YouTube Protects The Waterfront

In Seminole County excess nutrients impair our water systems as they do in many other suburban areas. When we say these nutrients are a non-point source of pollution, we can point to everyone as a contributor to them. Reducing nutrient impacts and protecting the waterfront is a role everyone must play and extension should try to spread this message to as many people as possible.

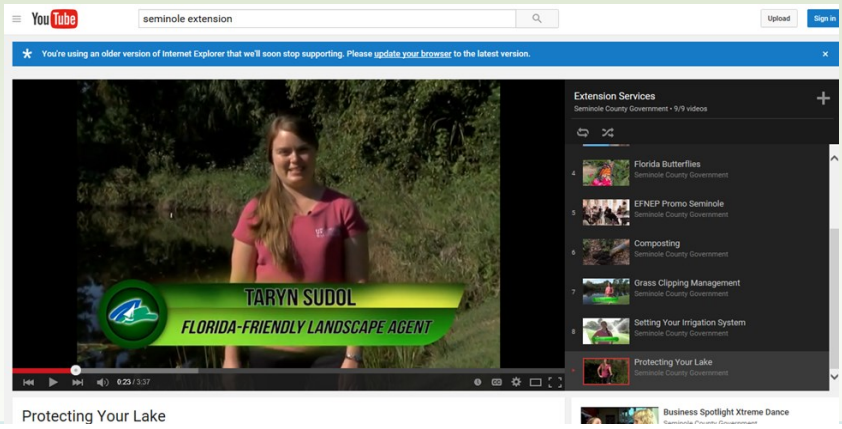
Unfortunately, when I give a class dedicated to "Protecting the Waterfront" my attendance level is low –maybe two to four. Eleven is respectable and the one time I had a class of twenty must have been a complete fluke because I've never had those numbers again. The people who attend usually live on the waterfront and are dealing with a system overrun with algae or invasive weeds. For them it's a very relevant topic; for their neighbors without waterfront property… perhaps it's out of sight, out of mind.

I imagine other agents still tinker with the best recipe for the perfect class: day of the week, time of day, length of time, outside and hands-on, inside and passive, maybe even giveaways and then marketing, marketing, marketing. I also think, as agents, we know just how effective a class can be –for those who make the effort to attend. That said, two hours plus travel time is a big commitment for a participant. What if they could get the same message in three minutes at their computer desk or on their cell phone?

I developed the "Protecting Your Lake" 3:30 minute video based off a homeowner's association recommendation. I was at their meeting because one resident thought the subdivision should host one of my lakefront classes. One board member said, "Eh I don't know about that but we'll put a video on the website." I wrote the script. The county's videographers went with me to shoot the video at locations within the subdivision. They edited the video and uploaded it to YouTube.

The Sweetwater Oaks community has 963 households. Besides being shared on their website, the video was promoted twice in their e-newsletter. In addition to the video link, I had a Qualtrics survey link. From this, the video had 197 views and 72 responses to the survey. They indicated a total of 297 behavior changes. Several months have passed since that newsletter but the video is still available on YouTube and other websites. It has been viewed 453 times; 112 responded to the survey and indicated a total of 455 changes.

Checking YouTube views and Qualtrics reports still leaves me wondering, who watched this video? Will they make the changes? You lose the personal connections and with that, some of the confidence of what will get done. On the other hand, I've reached more people with a video much more efficiently than I could with multiple classes. With the video ready to go, I can target other communities to share it in similar ways. Distributing the video strategically and getting communities or specific audiences to endorse it will increase the relevancy for viewers, enticing them to watch and investing them to make changes. Videos are becoming a more and more essential tool in the Extension tool box, provided we seek viewers on a local level.



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Food (Web) For Thought

Welcome back, FANREP'ers, to my column which I hope provides you food for thought to inspire you to consider future collaborations across disciplines that will enhance the impact and scope of your Extension programs.

For this penning, I want to continue to highlight the practice of agroforestry or the integration of trees in food & fiber production, both in spatial and temporal applications, in rural and urban settings, that I began in the last FANREP newsletter. In specific, I want to continue to point to the research of the multi-dimensional role of trees to promote greater sustainability and demonstrate the application of agroforestry to address today's most pressing concerns.

Agroforestry practices are helping landowners prepare for and respond to the risks that come from climate change. The severity of climate risks depends on location, the type of farming or land management practiced, and the adaptation measures put into place. For example, conservation buffers in riparian areas and other parts of the landscape can reduce flood and erosion risks for downstream farms and communities by slowing runoff and stabilizing stream banks. Additionally, riparian forest buffer shade can maintain cold water fish habitat in areas where stream temperatures may rise due to global warming.

Agroforestry also designs land management techniques that can provide habitat to promote pollinator conservation at the landscape level. For example, windbreaks or hedges help reduce wind speed, making it easier for pollinators to fly and visit flowers. Forest farming practices provide diversity of habitat structure and cooler temperatures which are beneficial to a greater diversity of pollinators. Riparian forest buffers provide protected habitats for honey bees to gather water for cooling their hives. Alley cropping, by paying attention to using multiple species with different bloom periods, can provide nearly continuous pollen sources and nectar forage within a single landscape. Finally, silvopasture provides an open understory where a variety of flowering forbs can grow. Rotational grazing practices can give these forbs an opportunity to recover from grazing or flower before being eaten.

For references on agroforestry practices and research, please, refer to my column in our last FANREP newsletter.

Until my next column, keep on building your food (web) of thought . . .

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Extension helps local governments address climate change

FANREP member **Alicia Betancourt** was nominated by Dr. Place to participate in the eXtension i-Three Corps innovation initiative https://extension.org/i-three-initiatives/. Her project, Borrow, Adapt, Adopt, (BAA) focuses on building climate resiliency through municipal policy adoption. Her project was one of only 69 national projects chosen by eXtension for rapid solutions in the climate and food systems.

This project provides easily editable tools for adoption at the local government level to implement best practices and procedures which increase climate resiliency. Tools are supported by workshops held 3-4 times per year to share, engage and support municipal action. The first municipal workshop to deploy tool kit 1 will be held June 16th in four South Florida counties; Monroe, Miami Dade, Broward and Palm Beach.
The municipal leadership team is developing four tool kits which consist of easy to edit documents such as policies, targets, ordinances and resolutions for adoption by local governments. The four tool kits allow communities to pick and choose areas to move forward based on their current engagement and interest. The four tool kit areas will be;

1-Borrow, Adapt, Adopt; Intro to Climate Issues. These will be the top 10 (or so) tools to begin climate engagement at the local level. Here you will find adoptable documents such as; signing the Mayors Climate Agreement, operations emission and energy reduction targets and action plan development.

2-Borrow, Adapt, Adopt; Next Steps. This kit will include tools to further climate resilience, mitigation and adaptation. Here you will find editable documents such as; environmentally preferable purchasing, comprehensive plan elements and more specific ordinances.

3-Borrow, Adapt, Adopt; Tools for Community Rating System Points. This kit will include specific policies, implementation tools used in other communities which gain points if adopted in the CRS system.

4-Borrow, Adapt, Adopt; Energy. This kit will focus on documents which can further a community's energy strategy such as; PACE, Audits, and efficiency targets.
The extension i-Three Corps has helped to jump start this initiative and will continue to help develop this project into something that can be offered nationally through extension.

To get more information contact Alicia Betancourt at betancourt-alicia@monroecounty-fl.gov

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Underwater Spiders and Springtails…what next?

The tremendous productivity of our coastal estuarine waters has made them very attractive to humans throughout history. Bivalves including scallops, clams and oysters have remained key elements in the human connection to these habitats. Oysters in particular have been important in many human cultures around the world but even the most astute consumers of these delectable shellfish very likely have no idea about the multitude of organisms that live with oysters.

The labyrinth of nooks and crannies created by the structure of oyster shells provides the perfect ingredients for a thriving community on our bay bottoms. Many a student of coastal ecology has been utterly amazed at the personal discovery of the tiny creatures who lead very interesting lives among the shells of the oyster reef.

When students from local schools around Apalachicola Bay began noticing the occasional tiny spider crawling over the oyster shells that they were studying, specimens were sent to the University of Florida Insect ID lab in Gainesville. It was assumed that the spiders had crawled or fallen into the student's buckets during sampling so when the lab experts replied with a positive I.D. of ***Paratheuma insulana***, the **oyster spider**, everyone was shocked. There was actually a spider that could live underwater. The lab experts were also excited by the fact that this was a new county record in Florida for the diminutive, 2mm-long spider species. Apparently, these tiny, reddish-brown spiders are able to trap air on the tiny hairs that cover their bodies and subsequently breathe through their exoskeleton. Wow, SCUBA without air tanks and regulators!

Oyster spiders feed on another very unique inhabitant of the reef called the oyster springtail. Springtails are tiny insects that have a projection that folds under their body and allows them to "spring" into action when disturbed. There are many species of terrestrial springtails but one type actually lives underwater on the oyster reef. The tiny, black springtails feed on detritus trapped among the shells and in turn are an important prey for the spiders. The WEB of life (couldn't resist).

If these two strange creatures weren't enough to pique your interest, there is an assortment of odd-looking polychaete (many bristled) segmented worms that slither among the shells as well. Commonly called bristleworms, they are part of the complex food web on the oyster reef. There are over 10,000 species of polychaetes described by scientists and some are red while others are bright green. Often their translucent bodies allow you to actually see the blood flowing through their circulatory system. One species is called the polydora worm and it has the capability to bore through oyster shells, creating what are commonly called "mud blisters."

Most folks have no idea about the amazing diversity of species that occur at this micro-level in the ecosystem. From the oyster flatworm, with its distinctive rows of eye spots on the head, to a scuba diving oyster spider, it is a true adventure every time you look into the clusters of an oyster reef. A small field microscope of about 20 power is useful for observing these typically unseen creatures of our estuaries. As the case usually is, the closer you look…the more you'll see!

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Conference Update

ANREP

BUILDING A PATH TO RESILIENCY

Uniting Natural Resources & Community Development

NACDEP
National Association of Community Development Extension Professionals

National Association of Community Development Professionals

Association of Natural Resource Extension Professionals

Joint Annual Conference

For the first time, NACDEP and ANREP are teaming up for a Joint Conference this summer—June 26-29, 2016. The conference will be held at the Sheraton Hotel in beautiful Burlington VT. Between our memberships we anticipate over 350 attendees, providing an excellent opportunity to broaden your Extension Network, presenting to your peers, and learn from an expanded menu. The Burlington location features an impressive diversity of both established and new, innovative and best practice programs. From economic development, forestry, water quality, housing, local food, social justice, placemaking, environmental education, arts and culture, sustainability, as well as public and private initiatives this location as it all.

Building a Path to Resiliency: Uniting Natural Resources & Community Development

Burlington Vermont
June 26-29, 2016

PLANNED "TRACKS" FOR PRESENTATIONS

Community Development
Climate Change
Community Resilience and Disaster Preparedness
Economic Development
Environmental Education
Energy
Forestry
Fisheries
Food Systems
Local Government Education
Land Use and Community Planning
Leadership and Civic Engagement
Programming with Diverse Audiences
Placemakting and Physical Design
Program Evaluation
Recreation
Range Management
Technology Tools and Techniques
Tourism
Water Quality and Quantity
Wildlife Management
Youth Programming

For More Information on the ANREP/NACDEP Joint Conference visit

http://www.nacdep.net/2016-anrep-nacdep-conference

THE TIMES THEY ARE A' CHANGING

MANGROVES - SNOOK–HOG'S OH MY!

In 2007 I was leading a group of students on a hike through the a salt marsh that I had walked many times before. As we were slugging along through the muck and mire something caught my eye off to the side.

I looked closer and then glanced at my colleague to see if he saw what I saw…he did…a live red mangrove… growing in a marsh in Pensacola… how weird is that? We thought so.

We returned each year to see how it was doing. Though not growing much—it appeared healthy and seemed to be doing fine. After joining Sea Grant in 2012 I was curious as to whether it was the northernmost red mangrove in the state. Maia McGuire told me they were finding them in Jacksonville as well. Probably at a higher latitude than where we were—which was a bummer—I wanted to be the "northern most mangrove". We began seeking information about other mangrove locations and we found them—in the Apalachicola area… red and black mangroves growing there. Weird… just weird. Just not a tree you would say is in the Florida panhandle. Our tree did fine until 2014. That winter we had a snow storm—it was bitter cold for a few days and all bridges between Pensacola and Apalachicola were closed. The red mangrove died.

So what is happening here? Are mangroves becoming more cold tolerant or is it not as cold? It seemed an interesting project to monitor. What other "tropical" species were making their appearance in our neck of the woods? Well, we were about to find out…

I was visiting Dauphin Island Sea Lab a couple of years ago and noticed a snook in their large tank. Curious, I asked the aquarist where they found it. "Off of our boat dock" he said. I replied "you caught it in Mobile Bay?" "Yep" he said, "We were stunned as everyone else—had never found one here."

According to Dr. Bob Shipp's book *Fishes of the Gulf of Mexico* the snook is in fact a tropical species and tends to hang near mangrove bays—but they occasionally are seen in the northern Gulf. Well, this was one occasion.

In the last year I was asked by Dr. Angela Collins to keep an eye out for goliath grouper in the northern Gulf. We have… and we have found them. Dr. Shipp indicates that these fish are found throughout the Gulf but are rare (or at least thought to be) in many locations—certainly the northern panhandle would be such a place but we are finding them. Hogfish are being found on a regular basis off of Apalachicola, another "south Florida" species.

I am sure there are other terrestrial species that are listed as "south Florida" that are being encountered in the north. Flowers, insects, mammals, who knows what else. This is an interesting time to begin monitoring such things and a great project for volunteers to help out with.
I do not have a list of "what to be on the lookout for" but most who live here know a different creature when they see one.
The times may be in fact a' changing.

(Red mangroves growing on St. George Island in Franklin County. Photo: Joshua Hodson)

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Natural Resource Specialist SPOTLIGHT

Dr. Holly Ober conducts applied and interdisciplinary research that focuses on the distribution, abundance, and human interactions with forest wildlife.

Holly is an Associate Professor and Extension Specialist in the Department of Wildlife Ecology and Conservation. Stationed at the North Florida Research and Education Center in Quincy, she is the only Wildlife Specialist north of Gainesville.

Her primary roles in Extension include serving as director of the Natural Areas Training Academy (a statewide outreach program that provides training on topics pertinent to natural resource management), a co-director of CFEOR ('Conserved Forest Ecosystems: Outreach and Research', a consortium of scientists and managers with an interest in sustainable forest management), instructor for wildlife and forest management events in north Florida, and ambassador of bat conservation.

Holly and her lab group (comprised of graduate students, post docs, and undergraduate interns) work to better understand mechanisms that explain the abundance, distribution and diversity of forest-dependent wildlife and plants, and to develop management recommendations that reduce conflicts between humans and wildlife. Recent research has examined the influence of forest management and restoration activities on endangered species (bonneted bats, red-cockaded woodpeckers), human dimensions of wildlife conservation and ecosystem service evaluation (gopher tortoises, sea turtles), identified tactics to moderate wildlife damage (armadillos, deer), and investigated factors influencing the distribution of endangered plants (Ashe magnolia).

She is currently president-elect for the Florida Chapter of The Wildlife Society, and serves as an associate editor for the Wildlife Society Bulletin. She has a Ph.D. in Wildlife Science and Forest Science from Oregon State University, an M.S. in Wildlife Ecology from the University of Arizona, and a B.S. in Biology from Duke University. She has lived throughout the country and worked with a wide variety of wildlife, but considers forests of the southeast to be most enticing.

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County Faculty Spotlight

Lara Milligan is the natural resource agent in Pinellas County… and there couldn't have been a better fit…

My love for nature was something that developed over time. I was more into sports than trees for most of my life, but once the natural areas I used to play in were transformed into pavement and houses, I began to take notice…this was when I was in middle school. I wasn't much for journaling as a kid, but I enjoyed drawing and writing poems and around this time I began to focus my work on the world that was changing around me. When it came time to choose which high school I would go to, I had an opportunity to apply for the four-year Jupiter Environmental Research and Field Studies Academy, which I was accepted into and completed. From there I was on a clear path to learn more about our natural resources and help others to learn about, love and explore them too!

When I was looking for a job once I completed my bachelors in Natural Resources Conservation and my Masters of Forest Resources and Conservation with a certificate in Environmental Education and Communication, I came across the job description for my current position and said, "This is my dream job!"

My position with Pinellas County was new, based on listening sessions Extension faculty held in previous years. I am blessed to be stationed at one of our satellite office locations at the Brooker Creek Preserve Environmental Education Center in Tarpon Springs. The Preserve is over 8,700 acres of uplands and wetlands, the largest remaining green space in my county! Extension offered to help keep the doors open to the Environmental Education Center here when the downturn in the economy struck, so in addition to my roles and responsibilities as a Natural Resources Agent, I also supervise two staff members at the Education Center and serve as the liaison between the county and the Friends of Brooker Creek Preserve.

With my position being brand new, I started with a blank slate and had to spend a lot of time seeing what the needs were in my community, and four-and-a-half years into my job, I'm still working on just that. My programs focus on the wildland urban interface since most of my calls deals with "how do I get rid of" instead of "how do I save" (insert critter of choice), and more recently my work has focused on watershed education. Yes, I can say "watershed" with this group!

I am currently working on teacher training, the Tree Walk, the Wildlife Wednesday Webinars, leading the Florida Waters Stewardship Program for Initiative 2, and working on public programming for climate change.

My one measurable goal for 2016 is to say "NO" to at least 3 opportunities !

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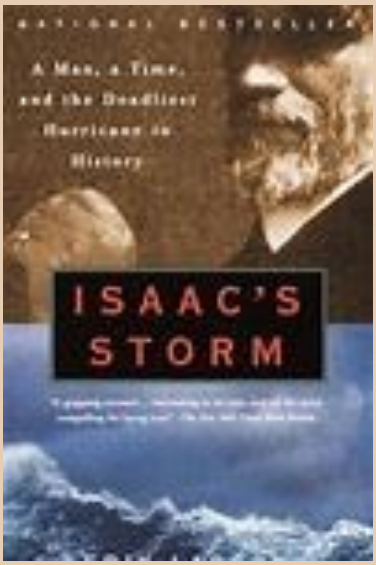
Books on natural history

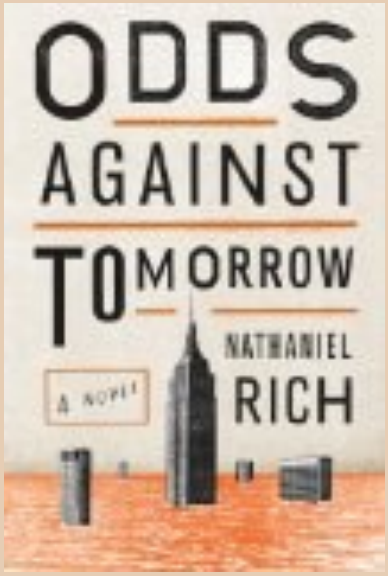
In this edition we are highlighting books that deal with climate issues. The first centers around the events of the most devastating hurricane in our country's history. The other introduces us all to a new genre of books… "Cli-Fi". Cli-Fi (climate fiction) follow the same idea as "Sci-Fi" in that the authors tend to relate these science concepts to the public better than some scientists. One difference is that "Cli-Fi" focuses more on the present situation… as opposed to the future. In future editions of the newsletter Robert Kluson will introduce us to more from this genre.

Isaac's Storm—A Man, a Time, and the Deadliest Hurricane in History. Isaac Cline was a meteorologist for the state of Texas at the turn of the 20th century. He believed that the city of Galveston, which becoming more prosperous at the time, was in no real danger from a tropical cyclone… he was wrong. In 1900 one of the deadliest hurricanes to ever hit U.S. soil landed in Galveston killing 10,000 people. Author **Erik Larson** won the Louis J. Battan Award for this well written account of that story.



Odds Against Tomorrow.
In this "Cli-Fi" book author **Nathaniel Rich's** plot explores the ramifications of climate change in the high stakes world of Wall Street and hedge betting on its potential disasters. The main character is not a callous financier but an individual with sensitivities and frailties who is personally transformed by the events of the plot.

This is an interesting series of books for those working in climate. Robert will suggest others and you can find more at http://www.cli-fi.net/.



FANREP Membership updates

Theresa Badurek, Membership Chair

FANREP Membership Update

What will stay the same:

- Send any updates/changes to your membership information to the FANREP membership chair (via e-mail).
- Send an e-mail to the FANREP membership chair showing your confirmation of payment of dues from Paypal/ANREP. Payment confirmation emails or registration confirmation for check payment must be sent to the membership chair by 11:59 pm December 31, 2016.
- The deadline to join or renew your ANREP/FANREP 2016 membership is December 31, 2016.

Reminder

What will change:

All membership dues for 2017 should be paid directly to ANREP via their website (http://www.anrep.org/join). Payments can be via check or Paypal. Membership dues will remain at $95 ($60 for ANREP and $35 for FANREP).

EXCEPTIONS:

- If you are a new agent (1st year), your FANREP dues are waived for that year, so you only have to pay $60 to ANREP.
- If you only want to be a member of FANREP and not ANREP (*we really don't recommend this*), send your dues of $35 to the FANREP membership chair. Make check payable to "ANREP, Florida Chapter".
- The current FANREP membership list (for 2016) is sorted alphabetically by last name.

FANREP Scholarship Update

- Your membership dues must be paid for the current year in which you're applying for a scholarship.
- The maximum scholarship amount that will be awarded per member is $300.00, one award per year per awardee. All travel award recipients are required to submit a summary of the presentation to be published in the FANREP newsletter.
- The member receiving the scholarship must present at the conference/meeting (speaker, abstract, poster, etc.). The total number of scholarships awarded each year will be based on available funds (this year there will be six).
- Steve Gaul Memorial Scholarships (for educators interested in the Master Naturalist program) with a maximum award of $225 are available. For information and an application see our FANREP webpage (see http://anrep.ifas.ufl.edu/Scholarship.shtml). There are 4 such scholarships being offered for 2016. Send applications to rkluson@ufl.edu and betancourt-alicia@monroecounty-fl.gov

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Florida Association of

FANREP

Natural Resource Extension Professionals

FANREP is a statewide association for Cooperative Extension Service (CES) professionals working in environmental education, fisheries, forestry, wood sciences, Florida Friendly Landscaping (FFL), waste management, water, wildlife, community development and related disciplines. Our main objectives are to:

- Bring Extension professionals together to discuss mutual natural resource issues, needs, and opportunities.
- Advance natural resource Extension through continuing education for Extension professionals.
- Promote cooperation among states and regions, agencies, associations, and businesses on natural resource education programs.
- Develop, sponsor, and promote education and training programs that advance natural resource management.
- Strengthen communication with Extension administrators

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UF UNIVERSITY of FLORIDA IFAS Extension

FANREP Newsletter was designed by Joan Bradshaw, and compiled by Rick O'Connor