



## Hastings/Tri-County Agricultural Area: BMPs and Water Quality/Quantity

*NRLI seeks to impact decision making in Florida by creating a network of professionals prepared to effectively address natural resource issues through collaborative leadership and conflict management.*

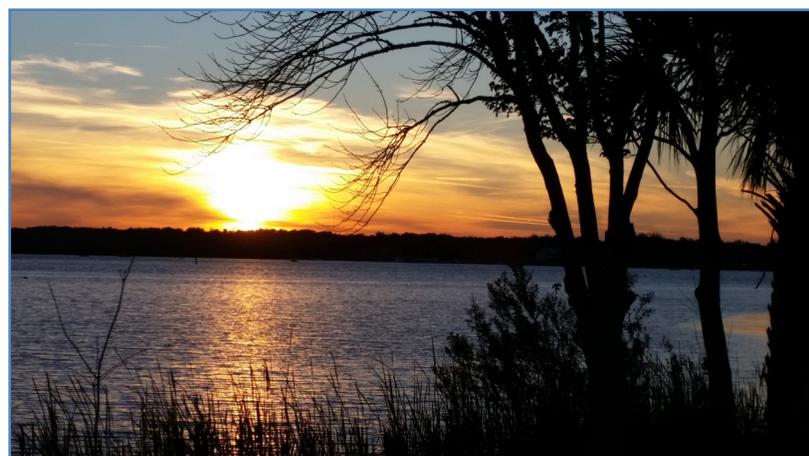


### Session Overview

Fellows and Project Team members convened in Palatka on February 19, 2015 for NRLI Class XIV Session 6. The issue focus for this session was *Agricultural Best Management Practices and Water Quality/Quantity*.

More specifically, this session focused on water quality/quantity issues in the Lower St. Johns River Basin and practices producers in the area are implementing to address these issues. Agricultural Best Management Practices (BMPs) are “practical measures that producers can take to reduce the amount of fertilizers, pesticides, animal waste, and other pollutants entering our water resources.” (FDACS 2013). Tiffany Lutterman Busby, President, Wildwood Consulting, Inc., gave an overview talk on the Basin Management Action Plan (BMAP) for the Lower St. Johns River Basin. A BMAP is “a ‘blueprint’ for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL).” (DEP2012). In other words, a BMAP is a set of strategies designed to achieve pollutant reductions put forth in the TMDL (strategies can include urban and agricultural best management practices, limits on permitting of wastewater facilities, conservation programs, etc.) (DEP 2012). Tiffany provided an overview of the TMDL Executive Committee process. This committee was appointed in 2002 and includes representatives from industry, agriculture, state agencies, and environmental interests. The goals of the TMDL committee are to:

- ◆ Provide information dissemination and exchange among stakeholder groups.
- ◆ Secure stakeholder participation in the detailed allocation and implementation stages of the TMDL process, bringing in diverse expertise and perspectives.
- ◆ Provide a forum to assemble stakeholder allocation agreements and forge consensus on an implementation plan.
- ◆ Improve linkages between TMDL implementation and growth management decisions of local governments.



St. Johns River. Photo by Jessica Ireland.

Photos from the Session 6 field trip:  
Tours of Blue Sky and Tater Farms.  
Photos by Jessica Ireland.

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# Session Overview

For our field trip, we visited two farms in the Tri-County Agricultural Area: Blue Sky Farms and Tater Farms. Mr. Danny Johns, Owner/Operator of Blue Sky Farms, is a fourth generation potato farmer in the Hastings area. He graciously hosted us on his farm on a chilly Florida winter day and explained the history of Blue Sky Farms, which was established in the 1920s by his great grandfather. Blue Sky specializes in potatoes and sweet onions and Danny showed us some of the innovative practices he is using related to water quality/quantity, including fertilizer banding and sub-surface irrigation and drainage. During the visit, workers were busily at work uncovering the potatoes that were purposefully buried the previous day to resist a hard freeze. Subsequent to touring Blue Sky Farms, we traveled to Tater Farms where Farm Manager Mr. Eric Hjort showed us around the farm, which is currently specializing in sod production. Eric also talked to us about the fertilizer and irrigation techniques that the farm is implementing, and we had the opportunity to observe a sod harvester in action. Both Danny and Eric talked extensively about water policy and the challenges faced by the agricultural community in a rapidly evolving world where market conditions and demands can change very quickly.

For our stakeholder panel, a group of individuals involved in agriculture and water quality/quantity issues in the Tri-County Agricultural Area joined us for a discussion on Friday afternoon. Stakeholders on the panel included:

- ◆ Chris Johns, Tater Farms; University of Florida law school student
- ◆ Pam Livingston Way, Environmental Scientist VI, St. Johns River Water Management District
- ◆ Katie Hallas, Environmental Consultant, Office of Agricultural Water Policy, Florida Department of Agriculture and Consumer Services
- ◆ Jeb Smith, St. Johns County Commissioner; Owner, Smith Family Farm Beef & Produce



Left: Mr. Danny Johns, Owner of Blue Sky Farms, explains how potatoes are covered to prevent freeze damage. Right: Danny talks to Fellows about the history of the farm and current challenges producers in the area face. Photos by Jessica Ireland.



Left: Mr. Eric Hjort, Farm Manager at Tater Farms explains the basics of sod production management. Right: a sod harvester in action at Tater Farms. Photos by Jessica Ireland.

# Curriculum Focus: Facilitating Planning Amongst Complexity and Tension

## Dealing with Difficult Dynamics

During Session 5 in Key Largo, Fellows learned about group task and maintenance functions. *Task functions* include initiating ideas or processes, seeking information, giving information, clarifying and elaborating, summarizing, consensus testing, and challenging/questioning assumptions. *Maintenance functions* include mediating (reducing tension, exploring needs and interests), monitoring participation, monitoring group energy levels, setting standards, and building trust (Mill 1980).

Task and maintenance functions help a group work toward meeting its goals. One very important maintenance function is dealing with difficult dynamics in a group. When groups are working through challenging problems or issues, communication becomes more difficult, and misunderstanding and frustration are common. Instead of trying to “fix” or “right” individual personalities, difficult dynamics should be treated as situations to be handled supportively as a group (Kaner 2007).

To begin this session, Joy Hazell led the group through an activity called “Communication Styles That Bug People.” Fellows were asked to think of behaviors that really bug them in a group setting/meeting and discussed these behaviours in small groups. They were then asked to think about a situation in which their own behavior could have been seen as difficult to others; explanations for why they might have behaved in such a way; and how others could have responded to elicit a change in behavior. Finally, Fellows were asked to share their thoughts on why they exhibited the difficult behaviors and strategies others could have used to constructively address them.

Common sources of challenging behaviors include:

- ◆ Threats to key interests;
- ◆ Threats to basic needs;
- ◆ Being ignored, lied to, or manipulated;
- ◆ Recalling the past: remembering frustration or disappointment from a previous situation;
- ◆ Envisioning the future: fear or threat of losing current interests; and/or
- ◆ Others not taking responsibility for their actions (FAO 2002).

In the second part of the session, Fellows were asked to work through scenarios typical of difficult dynamics encountered when facilitating or mediating a conflict management process. Groups role played scenarios in three acts: first, by demonstrating an ineffective way to deal with the behavior; next, by demonstrating an effective way to deal with the behavior; and finally, a whole group intervention for the behavior.

The key take-away from these set of activities is that it is important not to think about the individual person as difficult but, instead, to reframe individual behavior as difficult group dynamics. Possible interventions to deal with difficult dynamics on an individual level include describing what you are seeing in a non-judgemental way, making an impact statement, and/or redirecting group dynamics. Whole group interventions (i.e., interventions a facilitator can use to address difficult dynamics while remaining respectful and supportive of every group member and maintaining group process) are described in the diagram below (Kaner 2007).



Facilitators can use these interventions to address difficult communication styles with the whole group (Kaner 2007).

## Curriculum Focus cont'd

### **Scenarios Planning: Blue World/Green World**

Scenarios planning is a tool that can be used to generate alternative images or scenarios for the future of a given issue. Scenarios planning has been used by the U.S. government to identify trigger points for nuclear wars; by Shell Oil as a business tool to plan for possible oil shortages; and by the African National Congress and the Afrikaans regime as a tool for participatory, joint planning for the future of the South African government.

In NRLI, we teach a specific type of scenarios planning called “Blue World/Green World” (adapted from Saunders & Harris 1999). This is a “backcasting” activity in which participants are asked to generate alternative scenarios for an imagined future of a specific issue. In this activity, Fellows are divided into four groups, two groups who represent the “Blue World,” and two groups who represent the “Green World”. In the “Blue World,” the future is looking grim, and group members are asked to create a verbal snapshot of the dire situation in economic, political, social, and environmental terms. They identify the events, decisions, and forces that led to the future situation they find themselves in. In the “Green World,” the future is looking extremely bright and hopeful, and group members are asked to create a verbal snapshot of the an optimal future situation in economic, political, social, and environmental terms and to describe the events,

decisions, and forces that led to the current state of affairs. If participants know each other well and are comfortable around each other, groups can be asked to present the scenario as a skit or use other creative means of their choosing; an alternative is to have groups verbally present out their scenario.

One of the values of scenarios planning is that it can be a less threatening first step in a visioning or goal-setting process. Thinking about scenarios encourages open brainstorming from all members of a group and allows participants to be creative in discussing the future within a big picture context. In addition, this tool can help groups choose the future they want and identify actions and decisions that need to be made to achieve that future. One key consideration with scenarios planning is that groups using this tool need to be committed to monitoring results over time to ensure the group is working toward the path/goal it set forth.



Top: Class XIV Fellows Alison Adams and Jeremy Olson acting out a skit for their “Blue World” scenario. Bottom: Class XIV Fellows Beth Dieveney, Scott Calleson, Carrie Stevenson, and Gene McAvoy acting out a skit for their “Green World” scenario. Photo by Jessica Ireland.

# Difficult Dynamics-Understanding the Challenges of a 21st Century Farmer

Clay Coarsey & Matt Arsenault (Class XIV Fellows)

Each month, we ask a pair of Fellows to reflect on the session in their own words. This article describes the key takeaways from the point of view of Fellows Clay Coarsey and Matt Arsenault

The session kicked off with talking about dealing with difficult dynamics. The class was asked to comment on three difficult communication styles: Why do talkers talk? Why do blockers block? Why do jokers joke? The take home message from this discussion was that people are usually not deliberately trying to be difficult. There is likely a sincere motive behind their actions. The talker may be talking more than other participants because they are “thinking out loud.” In other words, they may need to speak out loud to help gather their thoughts or think. The blocker may be blocking because they legitimately believe the proposed path forward for the group will be detrimental to all. A joker may be telling jokes because the meeting is so tense that they are trying to lighten the mood. Often, the difficult group dynamics are the cause of the difficult individual behaviors. Understanding the root cause behind these difficult behaviors is the first step to helping a group address these behaviors and change their group dynamics. The class traveled to Palatka to experience firsthand how difficult dynamics had played out between farmers and government in the Tri-County Agricultural Area.

In America, farmers make up only two percent of the population yet are able to produce enough food to feed the remaining 98 percent of Americans. Farmers take great pride in feeding the nation. The session in Hastings focused on the Lower St. Johns River Total Maximum Daily Load (TMDL) and its effects on agriculture. A TMDL is the quantity of a pollutant that can be received by a body of water. The pollutants in the case of the Lower St. Johns River are actually two nutrients, phosphorus and nitrogen. Although agriculture is not the sole source of the nutrients to the river, farmers became a focus due to fact that they own such vast quantities of land in the basin. It was evident from both the stakeholder panel and field trip that farmers felt as if a target had been painted on their backs. They felt obligated to fix the river which was a problem that they were not solely responsible for causing. Agriculture had been in place in this region for well over 100 years. The farmers obviously felt that they were being treated unfairly, and hence, the initial attempts to engage farmers to reduce the nutrient loadings to the river were met with limited cooperation.

On the field trip, one of the farmers gave an example of the challenges that are faced almost every day. The farmer was trying to determine whether or not to apply fertilizer to the crop as a storm was approaching. If he applied the fertilizer and the storm came, the fertilizer would eventually make it to the river instead

of being used by the crop. However, if the clouds did not produce any rain over the crop and the fertilizer was not applied, the yield of the crop would suffer. Seeing firsthand the decisions that farmers must deal with every day gave us a greater appreciation for the challenges that they face in trying to balance keeping a business solvent while not harming the environment under increasingly stringent government regulations.

Farmers are typically not in the practice of applying more fertilizer to a crop than is required to attain the optimal yield. The farmers felt like they were ignored by the researchers that came up with recommendations for the rate of fertilizer application to certain crops. The firsthand knowledge of the farmer was not taken into account in the research. Since the researchers did not establish a relationship built on trust with the farmers from the genesis, it took years to rebuild a relationship built on mutual trust and understanding. The fundamental lesson learned from this session was the core NRLI skill of listening. If only the researchers had listened to the farmers initially, how much farther along would we be in this process? The future of agriculture adapting to the constantly changing markets and regulations seems to be as promising as ever with the resilient farmers in the Tri-County Agricultural Area.



Danny Johns, Owner of Blue Sky Farms, talks to Class XIV Fellows about the challenges of modern agriculture. Photo by Jessica Ireland.

# NRLI Class XIV Fellow Spotlight

## Greg Gibson



A seventh generation native of Wakulla County, Florida, Greg began a law enforcement career with the Tallahassee Police Department in 1990, progressing through assignments as a patrol officer, school resource officer, and D.A.R.E. instructor before taking a job with the Florida Department of Environmental Protection Office of Inspector General as an internal investigations lieutenant in 1998. Greg was promoted to the rank of

captain in 2002 and transferred to the DEP Division of Law Enforcement (DLE) in 2003 to assume the role of deputy bureau chief for the Florida Park Police. In 2007, Greg was promoted to the rank of lieutenant colonel and served as the assistant director of the DEP DLE until being designated its acting director in July 2011. When the DEP DLE was merged into the Florida Fish and Wildlife Conservation Commission Division of Law Enforcement in July 2012, Greg assumed the role of Deputy Director for Programs, serving in that capacity until January 2015. Having decided to make a career change, Greg is actively pursuing opportunities that will put his NRLI skills to best use.

Greg holds a bachelor's degree in criminology and a master's degree in political science from Florida State University and is a graduate of the University of Louisville's Southern Police Institute. He resides in Crawfordville, Florida with his wife, Julie, and daughter, Keleigh.

## Patty Huffles

Sr. Project Manager, Product Management,  
Johnson & Johnson Supply Chain



Patty Huffles is a Sr. Project Manager with Johnson & Johnson, where she has been employed since 1990. Her current role is management of commercialization activities for new products (medical devices) from research and development into manufacturing (U.S. and Ireland) and site-to-site product transfers. She also serves as coach and mentor to new candidates for Project Leader certification and participates in the SME Community of Practice for Project Management within Johnson & Johnson. Prior to working for Johnson & Johnson, Patty worked for the Navy as a Materials Engineer (Aerospace Manufacturing) and COTAR at the Naval Air Station, Jacksonville. There she met her husband, while he was assigned to HS1 – the mighty “seahorse” squadron for training helicopter pilots.

Previous to the Navy, Patty graduated from University of New Hampshire with a B.S. in Mechanical Engineering and then began work for Davidson Rubber Company in the automotive industry as an applications engineer. She relocated while transferring a new product to their manufacturing site in Tennessee, as a process engineer, where she loved the sun and warm weather. One more move south, to Gainesville, for a UF Master's Degree in Material Science and Engineering, and Patty was not going back north. Upon UF graduation, Patty began work with her current employer Johnson & Johnson. While not working, Patty enjoys exploring nature, kayaking, and hiking with her husband, Jim; children, Leia and Jimmy; and best friend, Buddy.

## James M. Erskine

Acting Water Resources Director,  
Miccosukee Tribe of Indians of Florida



James has worked as a scientist, science advisor, and Program Director for the Miccosukee Tribe of Indians of Florida for 16 years. In his most recent position as Acting Director of the Water Resources Department he leads a multidisciplinary team of

scientists that provide resource assessment and protection for 314,000 acres of Tribal lands within the Greater Everglades watershed. The team incorporates physical, biological, ecological data collections and analyses with traditional ecological knowledge (TEK) to provide long-term resources protection and build stewardship within the community.

James maintains a federal appointment by the Secretary of the Interior to the South Florida Ecosystem Restoration Task Force and appointment by the South Florida Water Management District to the Water Resources Advisory Committee. His expert analyses on the Clean Water Act, Everglades ecology, and Everglades restoration have been used at all levels of governance. Within his professional capacity, he has presented to the National Academies of Sciences Committee on Everglades Restoration; the bipartisan Congressional Everglades Caucus; and numerous national and international audiences.

James has a Master of Science Degree in Biological Sciences from Florida Atlantic University where he helped establish the Aquatic Plant Ecology Laboratory. His student research focused on physiological responses of marine plant communities to water quality variables, nutrients, and environmental stress. James is published in peer reviewed journals, government publications and has been featured on radio and television interviews.

# NRLI Alumni Spotlight

## Leslie Sturmer, NRLI Class V



Leslie Sturmer is a Molluscan Shellfish Aquaculture Extension Agent with Florida Sea Grant, UF/IFAS Extension at the Cedar Key Marine Field Office.

Leslie provides extension support concerning aquaculture to the molluscan shellfish industry sectors in Florida. Audience groups include marine shellfish culturists, commercial shellfishers, state/federal marine resource regulators, shellfish dealers, and interested general

public. Leslie conducts applied research projects in all phases of production management including genetic improvement,

management strategies, and evaluation of alternative molluscan shellfish species for culture; species include hard clams, oysters, and potential aquaculture species, such as ark and sunray venus clams.

Leslie provides educational programs for shellfish farmers highlighting growout production technology, seed production, product quality, water quality, health monitoring, species diversification, and organizational development. She also develops programs for new growers to foster economic development in rural coastal communities, as well as programs on water quality related to molluscan shellfish, such as monitoring, restoration, and citizen stewardship.

Leslie has a Master of Science in Aquaculture and Fisheries from Auburn University and a Bachelor of Science in Zoology and Fisheries from North Carolina State University.

Congratulations, Leslie, on being awarded this year's *Distinguished Service Award by the U.S. Chapter of the World Aquaculture Society!*

Few people in the field of fisheries and aquaculture can lay claim to fundamentally changing a community for the better the way that Leslie has in Cedar Key, Florida. In less than 20 years, a diverse team led by Leslie has saved the small fishing village of Cedar Key from the economic depression caused by the closure of the traditional gill net fishery by working with the community and government to develop the state's clam farming industry.

## Class XIV Session 7

Class XIV will be visiting Wakulla Springs for Session 7, March 19-21, 2015.

The issue focus is springs health/endangered springs and the curriculum focus is intervening in disputes.

## Class XIV Fellows

**Alison Adams**, Assistant Professor, University of Florida School of Forest Resources and Conservation

**Carrie Stevenson**, Coastal Sustainability Agent, UF/IFAS Escambia County Extension

**Gene McAvoy**, Regional Vegetable Extension Agent/County Extension Director, UF/IFAS Hendry County Extension

**Jeremy Olson**, Land Management Specialist, St. Johns River Water Management District

**Kimberly Sykes**, Deputy Manager, Crystal River National Wildlife Refuge Complex, U.S. Fish and Wildlife Service

**Clay Coarsey**, Professional Engineer, Suwannee River Water Management District

**Greg Gibson**, Lt. Colonel/Deputy Director, Division of Law Enforcement, Florida Fish and Wildlife Conservation Commission

**Matt Arsenault**, Policy Analyst, Florida Department of Agriculture and Consumer Services Office of Energy

**Stacie Auvenshine**, Biologist, U.S. Army Corps of Engineers

**Bonnie Wolff Pelaez**, Environmental Manager, Florida Department of Agriculture and Consumer Services

**Scott Calleson**, Biological Scientist IV, Division of Habitat and Species Conservation, Florida Fish and Wildlife Conservation Commission

**Patty Hutfles**, Senior Project Manager, Johnson & Johnson Vision Care, Inc.

**Beth Dieveney**, Deputy Superintendent for Science and Policy, National Oceanic and Atmospheric Administration

**Tamela Kinsey**, Environmental Engineer, U.S. Army Corps of Engineers

**Jessica Mendes**, Research Analyst, Lee County Environmental Policy Management

**James Erskine**, Acting Director, Water Resources Department, Miccosukee Tribe of Indians of Florida

**Allen Scheffer**, Assistant Director of Field Services District I, Florida Farm Bureau Federation

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