

THE BAHAMAS AGRICULTURE AND MARINE SCIENCE INSTITUTE

THE BLUE HOLE

THE BAMSİ NEWSLETTER

WINTER 2017



**BAMSİ COLLEGE ESTABLISHES
4-H CLUB: PRIMARY SCHOOL
STUDENTS GET THEIR HANDS
DIRTY**



**&
BAMSİ PROMOTES WELLNESS
IN THE WORKPLACE**

**BIO TECHNOLOGY
EXPERT RETURNS HOME
TO WORK FOR BAMSİ**

BAMSI ATTENDS THE UNITED NATION'S SMALL ISLAND DEVELOPING STATES SYMPOSIUM

The Bahamas Agriculture and Marine Science Institute was part of UN/Bahamas Symposium on Implementing the 2030 Sustainable Development Agenda in Small Island Developing States (SIDS): Equipping public institutions and mobilizing partners, held last month at the Melia Hotel. BAMSI was excited to be a part of the event and be involved in discussions on the challenges of food security for small island states and how that impacts the health and well being of the citizenry.



BAMSI had a strong showing at the Symposium. From left are Executive Assistant to the President Garry Russell, CEO/General Manager Alaasis Braynen and COO of GRAC Dr Jason Sands.

Marine Scientist and BAMSI lecturer Jennifer Pollom (right) explains how a hydroponics system works and how it can support food security and sustainability in small island state.



Team Work Makes the Dream Work: from left are Arundel Ginton, Senior Admissions Officer Jarenda Rahming, Marine Scientist Jennifer Pollom, Bob Brown and Information and Communications Officer Yolanda Deleveaux.



The Royal Bahamas Police Force Pop Band brought a touch of Bahamian culture to the international symposium.



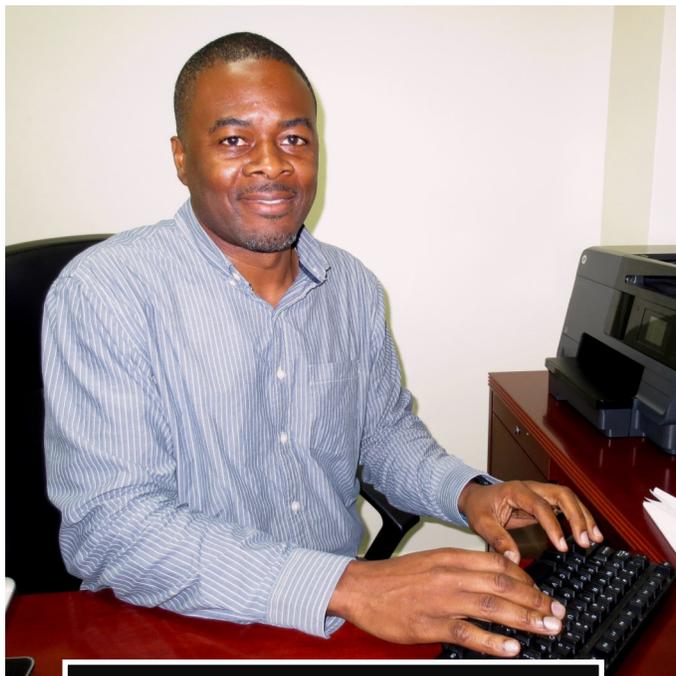
BAMSI officials were part of a special panel during the Small Island Developing States Symposium held in February at the Melia Hotel. Discussions turned to developing sustainable agriculture can bolster nations and improve the level of health

BAMSI RECRUITS INTERNATIONAL SPECIALIST IN FEED BIO TECHNOLOGY – AND HE IS A BAHAMIAN

With over a decade of research and field work in feed biotechnology, Dr. Jason Sands brings a wealth of international experience, industry exposure and technical expertise to the Bahamas Agriculture and Marine Science Institute (BAMSI). His addition to the staff, as the Chief Operating Officer (COO) of the Gladstone Road Agricultural Centre (GRAC), strengthens the human capital in place and further positions BAMSI as an agent of change in the development of this nation's agriculture sector.

The move is further expected to reposition GRAC as a pivotal player in the industry, supporting the Institute's overall goals of increasing food and nutrition security.

"The academic, research and extension themes of BAMSI are aimed at increasing the number of farmers, helping farmers develop better methods in agriculture, also in research to improve agriculture in the Bahamas and encouraging the general public to become involved in urban agriculture," Dr Sands said.



Dr. Jason Sands

Dr Sands' work in feed bio technology looks at enzymes and examines how these additives can be used to improve the utilisation of nutrients in farm animals. He spent the last five years working as a technical advisor to large feed companies across Europe and the United Kingdom that supply feed additives, advising them and their customers on how best to apply feed additives to improve animal production.

Having worked in Europe primarily, but also across the globe, Dr. Sands

acknowledged there is a big difference in the level of technology available in the Bahamas and even the work that needs to be done to increase and improve production, and implement sustainable measures in the industry.

Outlining what it will take for GRAC and the wider industry to be successful in its mission, Dr. Sands said, "it requires more efficient exploitation of existing human and natural resources, increasing the level of technological inputs, and also training of younger agricultural scientists to elevate the level of agriculture output. Increasing the amount of information available to farmers, in terms of scientific and technological resources is critical."

Ultimately, success will be found in the industry's ability to control its resources and

Continued on page 4.

World Food Day



Planting for the Future: As part of its World Food Day mission, BAMSI donated banana and coconut trees, along with a number of seedlings, to schools in New Providence and Grand Bahama. Head of BAMSI's Associated Farmers' Programme (AFP) Dr. Jason Sands was on hand to present the donations to representatives from each of the 16 schools present.



Minister of Agriculture Renward Wells visits the BAMSI booth and receives a handful of bananas. Also with the Minister are Member of Parliament for North Andros Carlton Bowleg (orange tie), Permanent Secretary in the Ministry of Agriculture Phedra Rahming and Marketing Officer Delreese Moss-Grant (in red). Representing BAMSI are Admissions Officer Jarenda Rahming, Information and Communications Officer Yolanda Deleveaux and Agriculture Development Officer Paul Major.

BAMSI Specialist continues



manage them effectively. "The challenge, and I think that it will be a great challenge, is to use the resources that we have more efficiently to make real advancements in the field."

In his role as COO, Dr. Sands is responsible for managing the activities of GRAC and ensuring its performance is consistent with BAMSI's strategic plan. The move is a 'relaunch' of sorts for GRAC, and points to the government's desire to see the centre emerge as a pivotal player in agriculture – bringing locally grown produce even closer to the country's primary population centres. Agriculture, and the development of the Bahamian industry, has always been important to Dr. Sands. As a boy in Eleuthera, he was surrounded by farmers and fresh produce. He had a keen interest in his

Continued on page 21.



Almost two dozen guidance counselors, community and civic leaders attended BAMSI's first Informational Symposium.

THE Admissions

Department of The Bahamas Agriculture and Marine Science Institute (BAMSI) held a series of Informational Symposiums for senior school guidance counselors, community leaders and civic groups. The symposiums were designed to familiarize attendees with the various arms of BAMSI and to give them a working session on the application and admissions process to the BAMSI College.

Dr. Raveenia Roberts-Hanna, executive director of the College, informed participants of the multiple degree and certificate offerings at the Institute, as well as the opportunity for successful applicants to obtain a full tuition scholarship. "BAMSI is the only institution - at the tertiary level - offering teaching and training to provide the professional and technical qualifications necessary for the various branches of agriculture and marine resources," Dr. Roberts-Hanna said. She added that BAMSI offers associate degree



Pictured are organisers of the annual event Executive Director of BAMSI College Dr. Raveenia Roberts-Hanna (left) and Senior Admissions Officer Jarenda Rahming.

and certificate programs in aquaculture, marine science, agriculture, agribusiness and environmental science.

BAMSI Features at Central Bank of the Bahamas HEALTH WEEK

BAMSI's Marketing Team Brings Fresh Produce to the People

With the national perspective increasingly focused on health and wellness of the Bahamian citizenry, many private sector businesses, agencies and non-profit organizations are looking at ways to help their employees and clients build robust, energetic lives – free from disease, illness and ailments. The BAMSI Distribution Centre has been a welcome addition to this movement with a number of organizations asking the BAMSI team to bring the produce into their offices. The team has routinely been requested by such companies as Atlantic Medical, Pictet Bank, Scotiabank, and many others. While BAMSI is often a part of a health and wellness week that sees a number of vendors participating – the Institute is often the only vendor on hand – a nod to the concept that sustainable health and wellness begins with what we put into our bodies.

MARKETING 101! BAMSI's Marketing Team brings the knowledge, helping members of the public make the best food selections for their needs. From left are Agriculture Development Officer Romeo Josey, Assistant to the Marketing Manager Curlean Major and Warehouse Officer Newell Duncan.



Curlean Major, Assistant to the Marketing Manager, speaks with a visitor to the Central Bank's Health Week.

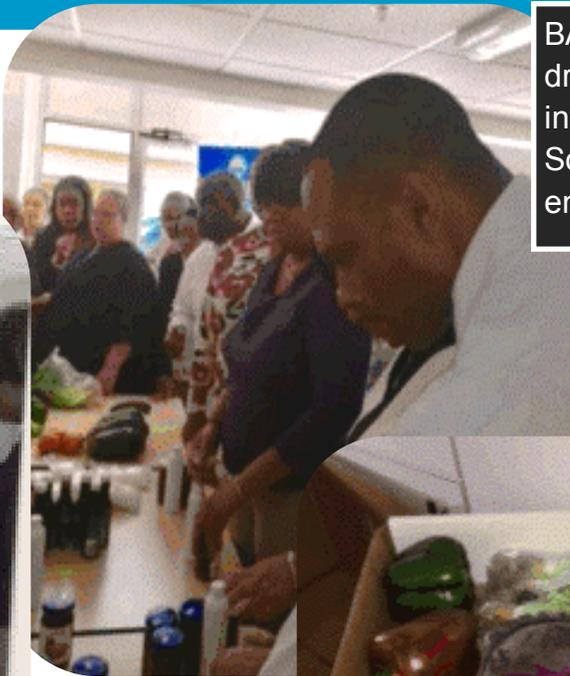




Treats Scotiabank to Farmer's Market

**The Business Community Welcomes BAMSI
As Part of Their Own Focus on Health and Wellness**

Below: Romeo Josey, Agriculture Officer, assists enthusiastic clients.



BAMSI's produce draws immense interest from Scotiabank employees.



A sample box at the Farmers' Market.



THE Distribution Centre's high flying marketing and promotions team recently treated the staff of Scotiabank's main branch to a mini farmer's market. "Employees were very enthusiastic about our products – within the first fifty minutes of sales, half of our inventory was gone!" said Romeo Josey, Agriculture Development Officer, BAMSI. The mini farmer's market featured produce grown on the BAMSI farm in North Andros, such as Lollo Rossa Lettuce, Ridgeline Lettuce, sweet pepper, purple cabbage, cucumbers, tomatoes, bananas and habanero peppers.

WELLNESS IN THE WORKPLACE INITIATIVE



SENIOR members and associates of The Bahamas Agriculture and Marine Science Institute (BAMSI), joined with the Ministry of Agriculture and Marine Resources, and the Bahamas Agriculture Industrial Corporation (BAIC) to invest in the health and well being of their employees. The Wellness initiative will focus on increasing the availability and consumption of fresh fruits and vegetables, and getting employees to become more active - as they move toward developing health habits and healthier lifestyles.

The Bahamas Agriculture and Marine Science Institute (BAMSI), in partnership with the Ministry of Agriculture and Marine Resources and Bahamas Agriculture and Industrial Corporation (BAIC), will serve as a stakeholder in the 'Wellness in the Workplace' government initiative launched earlier. With non-communicable diseases and obesity on the rise in this nation, these agencies are front and centre in the government's push to improve health conditions within Bahamian society because they provide one of the key ingredients needed to restore and maintain best health – fresh whole foods; fruits, vegetables and fish.

In its 2012 report, the Bahamas STEPS survey looked at chronic disease risk factors in the Bahamas revealing that 90 percent of

respondents acknowledged eating less than five servings of fruit and/or vegetables a day. The survey also revealed that 73 percent of Bahamians did not engage in vigorous physical activity.

The launch of the workplace initiative will see both agencies making a focused effort to make available local produce on a consistent basis, encouraging a higher level of consumption among staff members, stakeholders and initiative partners, including BAIC.

Along with these measures, both BAMSI and BAIC have committed to building a wellness program within their insurance plans to further support the initiative and the development of healthy habits among employees. Corporate exercise plans have also been initiated.

IMAGINE the plot line: new entity springs up on the economic landscape, sparks interest from a wide cross-section of society. Ripe with radical ideas, the institution advances cutting edge technology within its field, a talented and diverse workforce that pushes for industry best practices and standards, and even the unwitting political controversy – all told these elements raise its standing in the public sphere and add prestige points. As the institute progresses it takes on a following of sorts, individuals who stand on the outside, but who follow its every move - reading the stories and headlines, tracking the development and even preparing themselves to one day take advantage of the opportunity presented.

Perhaps not as scintillating as a made-for-TV movie on Lifetime, this scenario unfolded recently as daughter of the soil Ezralee Rolle joined the Bahamas Agriculture and Marine Science Institute's (BAMSI) team as a lecturer in biology and environmental sciences. What makes her employment remarkable is that she is an Androsian by birth – daughter of Bettymae and Ezra Rolle from North Mastic Point - who watched BAMSI spring forth and grow from strength to strength, and then decided that she would gain the skills necessary to position herself to one day fill a place at the Institute.

Like many young Family Islanders - including her eleven siblings – leaving Andros after graduating from high school in 2001 was the best, no, only option in Ms. Rolle's view. "You swore you'd never return to Andros, there just was nothing going on, nothing there."

Free of the restraints of secondary school, she would quickly head for the capital



Ezralee Rolle: the newest faculty member at the Bahamas Agriculture & Marine Science Institute: She brings experience, academic grounding and love for Andros!

where she landed a job, and eventually completed a Bachelor of Science degree in Biology, Combined Science and Education from the College of the Bahamas ('12). As fate would have it however, BAMSI would be the bridge that would reconnect her to the island of her birth. In 2014 the Institute was established and its launch opened a window for Ms. Rolle, a window which revealed what life could be like on Andros if she had a means to pursue her passion and a means to live her fullest life.

And so began a period of intense examination. She watched BAMSI push through growing pains that any start-up operation would experience, watched it prove its right to exist by increasing support for Bahamian farmers and building market presence for locally grown produce. She watched as BAMSI pushed for education,

A Love Affair Cont'd...

(graduating its first class of Associate Degree holder in 2016), research and technological upgrade in an industry that was previously slow to alter course, and timid in its approach and impact on Bahamian farmers and individuals who had an interest in agriculture. She watched as BAMS I flourished, cementing its position within the economy as a powerful player and leader in the agriculture industry.

“I’ve been tracking BAMS I in terms of wanting to get involved in what it is that BAMS I is about, which is Bahamians finally taking the lead in agriculture. And I love the idea that the plan was executed in Andros! I like the idea that they made use of the wide open space in Andros to diversify the economy and get people off Nassau, and also get people like me to go back home, and have a job or means of providing a lifestyle for myself while being in that type of environment - that’s something that I didn’t have before, that wasn’t an option before.”

Ms. Rolle joins the BAMS I team as an integral cog in the academic wheel. As a science based

institute, biology is a foundational course for both the agriculture and marine science streams. It is imperative that students are steeped in the theoretical and practical aspects of the science and have a firm grasp of its application, so lecturers who are well versed in the subject area and are able to connect the learning experience with the science of growing, harvesting and exploring the growth of food and the nation’s marine life are of significant value to the Institute.

“I’m excited to be a lecturer at the institute. As a lecturer I will bring all of my experience that I’ve had with education and working with students not only for their personal betterment, but also the betterment of communities and, essentially, of the nation.”

In Ms. Rolle, BAMS I has found an educator who has actively pursued what was important to her and used her platform as a biology teacher, in both the private and public school systems, to incorporate agriculture and a passion for growing food into the consciousness of her students.

Her portfolio includes the launch of the Bahamas Reef Environment Education Foundation (BREEF) Eco Schools Programme while at Temple Christian High School. The programme allows students to spend time outdoors and experience more of the environment. It focuses on activities that involve the beautification of the campus - looking at ways for more sustainable uses of energy, promoting recycling, and also has students working in the school’s garden. “This was my attempt to get children to appreciate where food comes from, and the



Continued on page 19.

BAMSI Continues Building Cadre of Professionals

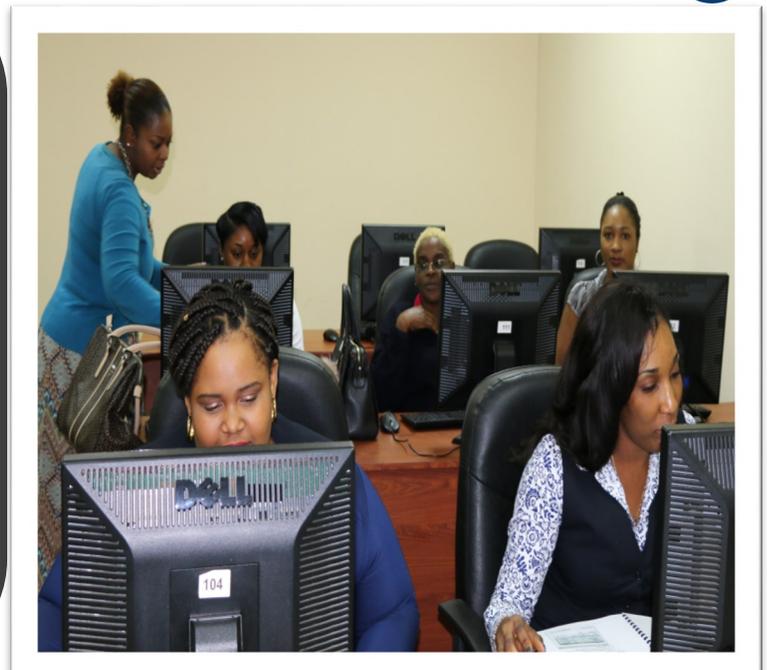
BAMSI staff at Quick Books training: from left Paul Major, Agricultural Officer/ Inventory Specialist, Florence Pratt-Meyers, Farm Administrator (North Andros) and Latrica Colebrook, Office Clerk (North Andros).

The Bahamas Agriculture and Marine Science Institute (BAMSI) continues to build a cadre of professionals by offering relevant professional development courses to its staff. Personnel from both the Nassau and Andros offices recently participated in a 16-hour Quick Books training facilitated by Synergy Bahamas. The course focused on various areas of financial management such as payroll, print checks and invoices. "BAMSI does not underestimate the importance of professional development; we realize that



equipping staff with the necessary tools to effectively and competently do their jobs, increases our overall success," said Ann-Marie Albury, Director of Human Resources at BAMSI.

Staff members flew in from North Andros - both from the campus and farm office - for the two-day training. Pictured in first row from left: Delsanea Thompson, Front Office Assistant BAMSI Institute (North Andros) and Candice Roberts, Front Office Administrator, BAMSI Institute (North Andros). Second row: Aquilla Pratt, Synergy Bahamas instructor (standing), Antallia Rahming, Cashier, BAMSI Distribution Centre, Laurette Miller, Credit/Accounts Officer and Andreana Thompson, Jr. Accountant.



BAHAMAS DEVELOPMENT BANK EARMARKS \$500,000 FOR LOANS TO SMALL FARMERS

THE Bahamas Government has earmarked \$500,000 in assistance to small farmers across the archipelago. The funding, which will be disbursed through a micro-loan initiative between the Bahamas Development Bank (BDB) and the Bahamas Agriculture and Marine Science Institute (BAMSI), is expected to go towards farm upgrades and agricultural improvements, Ian Rutherford, assistant manager of credit, BDB, said.

Under the agri-development initiative, the funding will be channelled through the Institute's Associated Farmers Programme (AFP) with member farmers able to apply for an individual loan up to \$10,000, with interest on the repayment set at prime plus two percent.

Executive Director of BAMSI Dr Raveenia Roberts-Hanna was part of a team who participated in a workshop put on by the bank recently. The aim of the workshop was to educate extension officers, AFP's administrative team and other members of the BAMSI team about the programme. Dr Hanna said the venture was an important step toward strengthening the nation's agriculture industry and would serve as a great resource for small farmers who need a modest injection of capital for farm upgrades and improvements to their infrastructure.

Dr. Hanna also pointed out that for students and graduates of BAMSI, becoming a member of the AF programme and accessing the BDB's micro loan initiative positions them for success as they look to launch their own entrepreneurial ventures in agriculture,

livestock, plants or even fisheries.

"This is key for our students because the exposure opens up their minds to potential ventures and their ability to build a business without all the red tape and hassle usually experienced when trying to work within the commercial banking sector," she said.

During the workshop, participants learned about the application process, including what documentation is needed to fulfil the bank's requirements, how long the application process takes (some two weeks), and what supporting documents – such as invoices and copies of quotes – should accompany the application form.

The most important stipulation that potential applicants should be aware of is that membership in BAMSI's Associated Farmers Programme is mandatory for the loan application to be processed.

Mr Rutherford explained the rationale behind the precondition, pointing out that agriculture and fisheries represents only two percent of the bank's portfolio and ninety percent of that category of loans are nonperforming. "Agriculture and Fisheries [represent] 1.8% or 1.6% of GDP. It is an underperforming and underdeveloped sector of the economy that we are seeking to develop as a part of our mandate," he said.

BAMSI's involvement in the initiative is viewed as a fail-safe. Members of the Institute's AF programme receive tremendous technical support and are encouraged to implement best practices at every stage of production. Once the farmers follow the programme, BAMSI is



BAMSI's Associated Farmers Programme will serve as the channel for disbursement of a \$500,000 micro loan portfolio to the nation's farming community: Pictured from left are Ian Rutherford, Bahamas Development Bank, assistant manager of credit; Zakita Bethel, head of BAMSI's Associated Farmers Programme; Garnell Pelacanos, director of administration, BDB; Dr Raveenia Roberts-Hanna, executive director, BAMSI; Shanell Adderley, extension officer (Long Island), BAMSI; David Adderley, extension officer (Long Island), BAMSI; Delores Burrows, accountant, BAMSI; Marilyn Lafleur, extension officer (Eleuthera) BAMSI and Garry Russell, executive assistant, BAMSI.

committed to purchasing

produce from them. "All we're asking is for you to register in the Associated Farmers Programme. BAMSI has a mandate to purchase whatever you are able to produce as a farmer so once BAMSI purchases any items, a portion of those funds will be used to pay down the farmer's debt to the bank. It's a controlled way to repay funding that we would be lending them," Mr. Rutherford said. He also noted that as part of the process, BDB will receive confirmation from BAMSI that the farmer/operation is viable before awarding the loan.

Applicants should also be aware that under the lending terms, the bank will provide financial support for tangible assets only. Each

applicant can apply for a total of \$10,000 and those monies are expected to go towards items such as an irrigation system, farm equipment, buildings (greenhouse, slaughter house, drying facilities), office equipment and animal production apparatus. As part of BAMSI's AF programme, applicants will already have access to basic farm materials such as seedlings, fertilizer, pesticides and even livestock.

As part of the approval process, Mr. Rutherford indicated, the bank will examine the individual borrower, and the nature and amount of the loan. The repayment term of the credit facility is determined based on the useful life of the asset being purchased.

BAMSI SIGNS CONTRACT WITH ANDROSIAN ENTREPRENEUR



Androsian signs contract with BAMSI to provide animal feed. Seated from left are Chief Executive Officer (CEO) of BAMSI Alaasis Braynen, and Cerone Dean. Standing from left are Chief Operating Officer (COO) for GRAC Dr. Jason Sands and Dr. Keith Cox, veterinarian, BAMSI.

Executives of the Bahamas Agriculture and Marine Science Institute (BAMSI) have signed a contract with Androsian entrepreneur Cerone Dean to provide the Institute with animal feed produced using specialised techniques.

The technology used by Mr. Dean involves the production of highly nutritious fodder in a protected agricultural environment – which is an important element in overcoming the challenge of feed shortage during times such as the dry season when pasture growth is constrained. “Feed is critical to livestock production, however in the Bahamas feed represents a major constraint to livestock development,” Dr.

Jason Sands, chief operating officer (COO) of the Gladstone Road Agricultural Center (GRAC), said.

Feed is traditionally grown in open pastures which are susceptible to environmental challenges, Dr Sands said. Conditions, such as low levels of rain, may result in an insufficient and nutrient deficient feed supply. As a result of these difficulties, BAMSI fully supports Mr. Dean, whose methods promise a consistent supply of feed which can be used as a supplement to feed produced at the BAMSI demonstration farm.

BAMSI veterinarian Dr. Keith Cox described Mr. Dean’s product as very exciting,

adding it presented his team with the opportunity to fulfill their goal of demonstrating the productive capabilities of livestock operations in the Bahamas under conditions where nutrition is not a constraint.

Mr. Dean expressed excitement about the opportunity to provide animal fodder to BAMSI and looks forward to delivering a high-quality constant supply of animal feed. Chief executive officer (CEO) for BAMSI Alaasis Braynen, said Mr. Dean is the first example of BAMSI’s entrepreneurial programme, which he foresees creating additional opportunities throughout the family of islands.

BAMSI BRINGS GREEN HOUSE TECHNOLOGY TO LONG ISLAND

BANANA PLANT SHIPMENT

ANDROS TO NEW PROVIDENCE THEN TO LONG ISLAND

Over the summer, six-thousand (6,000) banana plantlets were collected from the shade-tunnel fields at BAMSI's Research and Tutorial Farm in Andros and placed in cardboard bins and trucked 50 miles to Fresh Creek.

Bahamas Ferries then transported the plantlets to Potters Cay Dock in New Providence. Once on the dock, the crates were then loaded on another vessel and shipped to Simms, Long Island.



BAMSI reached out to several schools in Long Island — NGM Major High School, Lower Deadman's Cay Primary School and Simms Primary — to support the introduction, and in some cases the development, of an agriculture programme for students. BAMSI assisted with the construction of green houses and also the donation of banana plantlets. Pictured top left are Maurice Minnis, Packing House Manager, Mr. Avon Cothrel of BAMSI, who managed the construction of the Shade-House, Mrs. Jennyilee Rolle, NGM Major High School, NGM Major Principal Ednel Adderley and CEO of BAMSI Alaasis Braynen. Pictured bottom left are BAMSI CEO Alaasis Braynen, Head Mistress of Lower Deadman's Cay Primary School Lucy Adderley, Maurice Minnis, Packing House Manager and Mr. Avon Cothrel of BAMSI.

...BEGINNING WITH THE LITTLEST SEEDS



Pictured top right are Principal of Simms Primary School Gretchen Rolle (left), with BAMSI CEO Alaasis Braynen. Pictured bottom right in front of the shade house from left are BAMSI's Extension Officers Shanell Adderley and David Adderley, and Principal Rolle.

BAMSI GRADUATE SET TO BE PUBLISHED IN SCIENTIFIC JOURNAL

STUDENT SUCCESS STORIES

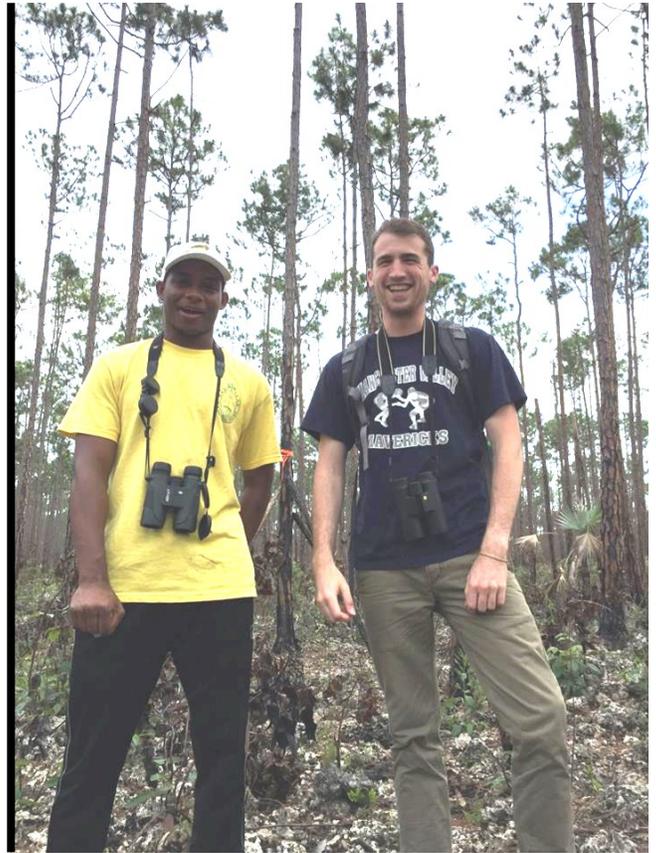
Lehron ‘Roni’ Rolle, has many things to celebrate. The Andros native was named valedictorian for the Bahamas Agriculture and Marine Science Institute’s (BAMSI) graduating class of 2017, he currently holds an Associate of Science degree in Marine Science and he recently received news of another accolade that can be added to his growing portfolio – he will be a published author. Mr Rolle has been listed as second author on a scientific paper on the Bahama Oriole and its pine tree nesting habits, entitled, “New Documentation of Pine Forest Nesting by the Critically Endangered Bahama Oriole (*icterus northropi*).” The article is set to be published in an upcoming edition of the Caribbean Journal of Ornithology.

The article is the result of research that Mr Rolle engaged in as part of a joint collaboration between the University of Maryland, Baltimore County (UMBC) and the Bahamas National Trust (BNT) for the Bahama Oriole Project.

Mr. Rolle's pathway to authorship began when he participated in the Bird Guide training course conducted by BNT in collaboration with the Ministry of Tourism, the National Audubon Society, and the Inter-American Development Bank (IDB). He did so well that in the summer of 2016, Ornithologist Dr. Kevin Omland from UMBC invited him to intern as the leading field assistant for the Bahama Oriole Project.

Data from the project was subsequently submitted by UMBC and accepted by the Caribbean Journal of Ornithology, with Mr Rolle listed as second author of the scientific paper.

The Bahama Oriole is an endemic species to Andros, Bahamas, which is one of the



Lehron Rolle (left) with fellow researcher Daniel Stonko. Mr Stonko is the lead author of the article on the Bahama Oriole Project.

reasons that it is considered the most critically endangered bird in the region. The aim of the project was to collect data that could lead to a better understanding of the species’ nesting behavior, which could ultimately lead to improved methods of conservation.

Previously, the Oriole had only been observed nesting in coconut palm trees in residential areas. However, Lehron’s contribution to the project was the discovery of an Oriole nest in a Caribbean pine tree within the forest, a rather undisturbed habitat. With a significant portion of Andros being comprised of this habitat, this major discovery may indicate

Continued on page 19.

HOME GROWN EDUCATION TRUMPS INTERNATIONAL EXPOSURE



Jerchoyae Moxey found the right academic fit in BAMSI's North Andros campus.



BAMSI is able to provide the hands-on experience Ms. Moxey believes is critical to her success as a marine scientist.

ACADEMIC and career goals were well in hand for Jerchoyae Moxey. Just a week after graduating from Kingsway Academy in 2015 she was on an airplane travelling to the University of Tasmania where she had been accepted into the Marine and Antarctic Sciences Bachelor's Degree programme. While Jerchoyae's experience was an amazing one - what teenager would not want to be half way around the world pursuing their passion, free of parental constraint and in an exotic location to boot - the focus on a world alien to all she knew coupled with a lack of field exposure caused her to reassess the way forward.

In the midst of figuring out her next move however, BAMSI fell into her lap...changing the way she viewed the learning process, increasing her appreciation for home grown and getting her academic and career goals back on track!

And now, months later, Jerchoyae has wrapped up her first semester at BAMSI, having spent the past few months in Andros working toward an Associate of Science Degree in Marine Science.

"[BAMSI] is amazing! It's more hands-on than I ever would have expected. It doesn't matter if you're doing marine science or agriculture, they have you out learning about how you can improve your environment as compared to sitting in front of a computer screen. That's how BAMSI changes everything and separates itself from all other universities," she said.

In the beginning

Jerchoyae's interest in all things marine began when she took her first swimming lesson around the age of six. It was love at first splash and it piqued an interest in her that has never wavered but rather expanded due in no small part to the nurture and encouragement offered by her parents and siblings. "Once my parents realized I had an interest in it they put me in more swimming classes to better my abilities. They bought me every

Moxey Continued...

science book and a microscope which was very dear to me until it was broken (by the little hands of a sibling who would later redeem himself with his support). They always encouraged me, telling me that if you believe in yourself you can achieve what you want to do.” As a student of Kingsway Academy, Jerchoyae’s passion for the field was further developed. In grade ten she joined the school’s scuba club and became certified in open water diving. She also received her certification in advanced open water diving. So, it was a surprise to no one that she chose to enter the field of marine science.

Following graduation, her decision to continue her education in Tasmania was, surprisingly, a rather straight forward process. “I was looking online for colleges in Australia – they have great white sharks and the great barrier reefs – and I stumbled across the University of Tasmania. I applied and got in the same day. My mom encouraged me to go, but my dad wasn’t too sure about it.”

With her mother’s help persuading him, Jerchoyae received her father’s blessings and one week after her high school graduation she was on a flight to Hobart, Tasmania (an island state of the Commonwealth of Australia) to take up Marine and Antarctic Sciences because the semester started in July. “I chose to go there because I was really interested in the great white sharks and thought it would be an amazing research opportunity. And it was all going great for a period of time, we had labs, lectures, but what was missing was the field work, going out looking at animals in their natural habitat. It was not as hands on as I thought it would be and it was more focused on the Antarctic region.”

Jerchoyae had been a student at the University of Tasmania for a year and a half when it suddenly hit her: “why am I here helping another country when I could be at home helping my

own.” In November 2016, she left Tasmania. She still wanted to pursue a degree in the field of marine science, but she was certain that Tasmania and the Pacific Ocean were not in the right hemisphere for her. Leaving school in November created a bit of a snag however, for many schools the deadline to apply for the spring semester had passed. Not to be deterred, Jerchoyae planned to work for a few months, apply to schools in the interim and



Brothers in the lab! Ms. Moxey is surrounded by fellow students Wayne Alcide (left) and Casnell Joseph.

then restart her degree programme in the Fall of 2017.

“I wasn’t planning on going to school right away, but a friend of the family showed me and my sister this newspaper article about BAMSI and their new online courses that they had and I decided that while I was going to work I would take up online courses to have information fresh in my mind. So, I got in contact with Ms.



A true Androsian at heart, Lebron is comfortable in nature. Pictured above is Lebron on one of his many diving escapades.

that the species is more abundant than previously estimated.

As a result of his efforts Mr Rolle, who holds an Associate of Science degree in Marine Science, and who landed a pristine job shortly after graduation with BNT, was also featured in the Audubon Society magazine, 'Birds Mean Business'. The profile, which explains that the project was launched with the goal of reversing the Bahama Oriole's decline through research, conservation and education, highlights how being trained as a guide led to his success with the Bahama Oriole Project.

"On the first day of fieldwork in 2016, Rolle discovered an active nest with two adult Bahama Orioles and several fledglings. The nest was not in a coconut tree, as expected, but in a Caribbean pine. On following days, Rolle' team found another nest in a thatch palm and several more pairs of birds with territories in the pine forest. The discovery of pine-forest nesting overturned previous assumptions about Bahama Oriole breeding ecology," 'Birds Mean Business', Audubon Society.

Mr Rolle told the society, "with the finding we realized that there was more habitat and potentially more birds than anyone thought

before. That was very good news for the bird." Today Mr Rolle is a proud alum of BAMSI, whom he credits for most of his academic success and scientific accomplishments. The Institute continues to support the development of a conservation minded citizenry by building partnerships with both regional and local environmental groups that provide opportunities and exposure for its students and staff.

B

A Love Affair Continued...

importance of sustainability," she noted.

Focused on the way forward, Ms. Rolle, like any good investor, is ready to take full advantage of her place at BAMSI. As someone who has her own interest in agriculture and the nature of growing food – she is looking forward to the learning aspect as well. She is currently working towards a Master of Science degree in Agriculture and Life Science from Virginia Polytechnic and State University. "This is something that I feel will be great for me in terms of how much I can learn and how much information I can gain, [having access to] people with all these diverse backgrounds in marine biology and different sciences. This is something that I can definitely feed off – helping my own personal development and aspirations."

Looking forward to a satisfying career with BAMSI - in Andros - Ms. Rolle said she fully endorses the goals and vision of the Institute. "I personalized it to make it my own mandate to extend this vision throughout our whole country. I believe in education, I believe in the power of unifying people to a cause that makes sense. It makes sense for us to be able to feed ourselves It makes sense for us to develop products that we can easily make right here in the Bahamas as opposed to importing products from all over the world. So I endorse BAMSI and I think that in the long term it will be something that builds our nation."

B

Moxey Continued...

Cascharel Taylor, [BAMSI's then admissions officer] and she informed me that I actually could apply to BAMSI for the Spring semester even though the deadline had passed. So that made it seem like everything was falling into place and that I was meant to go there – I thought nothing could happen until the fall, but BAMSI changed everything.”

Life in the Midst of BAMSI

Not only did Jerchoyae leave Tasmania and the Pacific region, she quickly left the relative hustle and bustle of New Providence as well for the quiet outback of Andros. Life in the ‘big yard’ was... good. In Jerchoyae’s eyes, Andros and Tasmania differ in so many ways. Andros, the largest island in the chain of the Bahamas, is covered in pine forests and dense shrubs, and is largely flat, Tasmania on the other hand is



Jerchoyae has quickly acclimated to her surroundings and is now one of the guys!

hillier. “If I decided to walk to school in Tasmania I would have to climb multiple hills.” Like many small communities, with Jerchoyae’s arrival everyone wanted to know who the new girl was. “Over here there are lots of friendly people, they want to know you, they want to get to know you. In Tasmania, when I first got there it was quiet and I didn’t know anyone. They [classmates] knew each other already because they had started the semester together and I came in a little late. I was kind of like the odd girl out, but I was able to make a few friends at church.”

At school, Jerchoyae enjoys the smaller classes, which is not always the case at larger universities around the world. “You have more chance of having a one on one conversation with the lecturer if you need it, and in that case no one gets left behind,” she said.

It is the opportunity to do field work, to explore the local environment, to touch and smell and have the full sensory experience however, that resonates most with her and is exactly why she made the transition to BAMSI.

“[Following] a marine ecology class where we were learning about jellyfish (cnidaria) and queen conchs, we went to the Conch Sound and Lowe Sound beaches to explore. We went into the water, and the lecturer, Dr. Barton, gave us a plastic bag and told us to recall what you have learned from the lecture. He said ‘go out and bring me five different ones each’ and he explained that this one does such and such in the water... That’s how BAMSI changes everything and separates itself from all other universities.”

One of the benefits of being at a smaller institution is also that your fellow classmates can quickly feel like family, and Jerchoyae describes them as “very accommodating”

And at the dorms, where she is one of only a few young women, the male students call themselves her big brothers. “Once you get to know them we can all come together and hang out, and play dominoes or study together or just have fun,” she said.

“If I could go back to 2015 I would choose BAMSI,” Jerchoyae said, but she quickly corrects herself “...probably not...but I don’t have any regrets! Everything up until now has led to BAMSI, so if I chose it from the start my experience may have been different. So I can appreciate it more having had that international experience. This has made me realise it’s never too late to make a change and realize if something isn’t working for you, you can always backtrack and fix it.”

BAMSI RECOGNIZES IICA REPRESENTATIVE'S CONTRIBUTION



Pictured above with Mr. Messina (far right), is Executive Director of BAMSI College Dr. Raveenia Roberts-Hanna (in pink) and an array of agriculture experts and consultants who attended the European Union (EU) funded Agriculture Policy Programme. The project, which focused on livestock management, key principles of beekeeping and root crop development, was spearheaded, in part, by IICA, CARDI and CARICOM.

MANUEL Messina, former Country representative for the Inter-American Institute for Cooperation on Agriculture (IICA) was recognized for the immense work he has done in the Bahamas, and especially with The Bahamas Agriculture and Marine Science Institute (BAMSI) including accessing international funding for many of the Institute's seminars, workshops and research initiatives. Mr. Messina leaves the Bahamas after a five-year stint.

Every five years, IICA stations a representative in The Bahamas (and other member states) to encourage and support the country's efforts to achieve agricultural development.

Specialist Cont'd

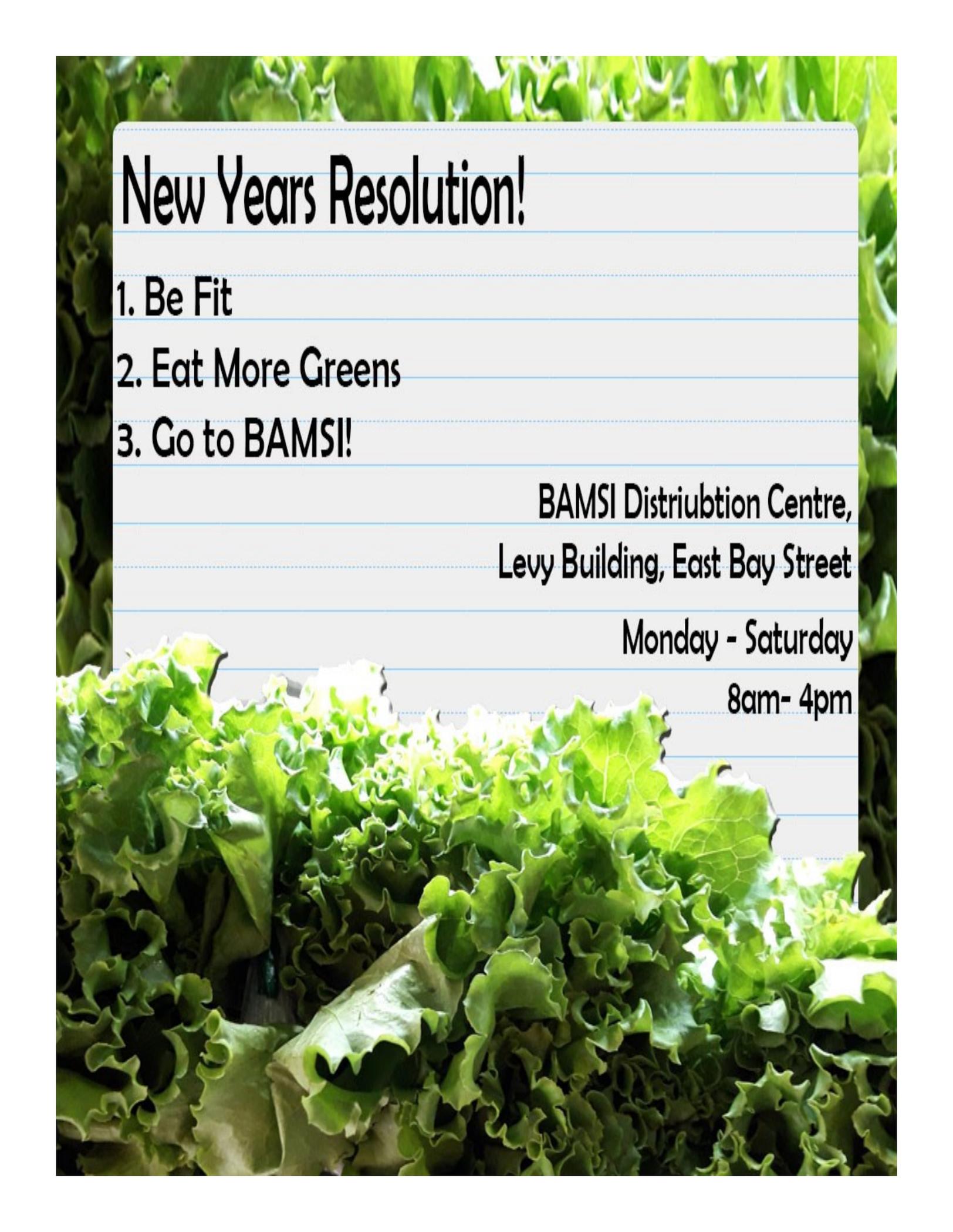
grandparents farm activities and was part of a community where many families had a small plot or field. "The fact that you could always at any time of the year find a variety of local produce, this for me was one of the real benefits of that environment where more of what we eat is grown locally and why I feel that it's essential that we get back to that because I think that's a much more sustainable and healthy way to live."

Having spent more than 20 years abroad, Dr. Sands said it was always his goal to return to the Bahamas and get involved in the nation's agriculture sector. "I always kept that desire to return and to make a contribution and to help with the further development of agriculture in the Bahamas. With the establishment of BAMSI and the work that they are doing I felt

that it was an excellent project that can help to further develop agriculture in the Bahamas and I wanted to be a part of that.

"I feel I can contribute to BAMSI's effort by using contacts that I have established globally to encourage cooperation with internationally recognized scientists in research, and to some extent with private companies in terms of getting supplies of the latest advances in agriculture technology.

Dr. Sands holds a PhD in animal nutrition from Purdue University in Indiana, a master's degree in animal science from the University of Tennessee in Knoxville and a bachelor's degree in Agriculture from Tuskegee University in Alabama. He is also a graduate of the former College of the Bahamas – holding an associate's degree in agribusiness.



New Years Resolution!

1. Be Fit
2. Eat More Greens
3. Go to BAMSI!

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Agriculture Extension Officer Ty Sands (above), presented on Neonatal Survival in sheep: challenges in the Bahamas'

A team of agriculturalists from the Bahamas Agriculture and Marine Science Institute (BAMSI) were invited to present at the 53rd Annual Meeting of the Caribbean Food Crops Society (CFCS) held in Isla Verde, Puerto Rico in July..

The annual international gathering, which brings together a range of scientists, experts and technicians in the field of livestock and crop production, provided a platform to expose strides made in the development of the Bahamas industry in a number of areas. The presentations, which received favourable responses from conference goers, focused on livestock development, reignition of crop production following Hurricane Matthew, and measurable increases experienced in food production through educational and economic strategies and incentives.

BAMSI STAFF ATTEND 53rd ANNUAL MEETING OF THE CARIBBEAN FOOD CROPS SOCIETY

Agriculture Extension Officer Montez Hopkins, (below) focused on the revival of BAMSI's banana plantation and crop management pre- and post-Hurricane Matthew which reduced the level of damage incurred.



Agriculture Extension officer Zakita Bethel discusses BAMSI's Associated Farmers' Programme and its impact on production levels in the country with other conference goers.

THE BLUE HOLE

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