SHELL·O·GRAM

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March-April, 2015_____Volume 56 No. 2

Because of a scheduling conflict imposed after the room was legitimately secured by us and acknowledged by the library, we have once again been denied the privilege of meeting there. Fortunately (and kindly), Charlotte Thorpe has agreed to host the (fourth) March 26, 2015 meeting at her home (see directions/map) at the usual 7:00 PM. Harry Lee will present the Shell-of-the-Month, *Hastula salleana* (Dshayes, 1859), Sallé's Auger, a local species living on high-energy sandy shorelines. Charlotte will discuss the long history of the Jacksonville Shell Club collecting expeditions to the area of Cedar Key, on the west-central coast of our state. Club members, sometimes in large groups, have been going there almost yearly for four decades.

The club will meet at the usual time and place on April 23, 2015. Rick Edwards will give a program on diving/shelling forays he and family have taken over the last couple of years. These are a little different from the usual planned shelling trips in that the collecting is done while in ports-of-call on the itinerary of cruise ships that carry him and his family around the West Indies and other Caribbean coasts. Brian Marshall will present the shell-of-the-month, *Conus dusaveli* H. Adams, 1872, with which he became familiar while residing on Okinawa.

Presidents Message below, see you at the March meeting!

Dear JSC Members,

As many are aware, the club has been seeking to find a new venue to host our annual shell show. For those who have participated in planning and organizing such an event, you are well aware of the time, effort and coordination required to accomplish this task in familiar accommodations. For this year we made an attempt to secure space at MOSH to host our event. However, due to a combination of timing and being unaccustomed with the new space, the club has decided to cancel plans to move forward with a Shell Show for 2015. I would like to Thank Dr. Harry Lee for the time he invested in obtaining information and coordinating with MOSH personnel and various attendees of our show. Although our plans for this year will not come to fruition, the time invested thus far has not gone wasted, rather we have a better understanding of the obstacles that must be overcome and are more prepared to begin planning a show for 2016. For all that regularly attend our show, we appreciate your support and look forward to hosting a show next year.

Sincerely,

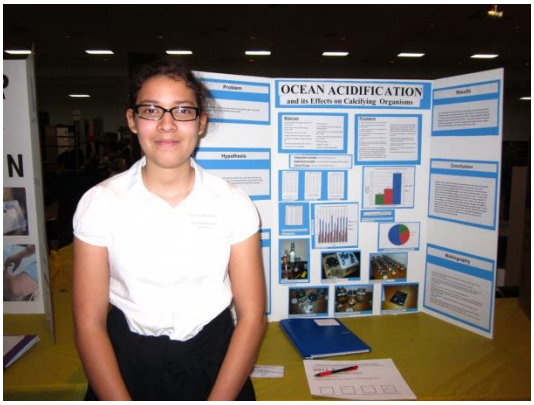
Brian Marshall, JSC President

This year's Science Fair JSC Award winners

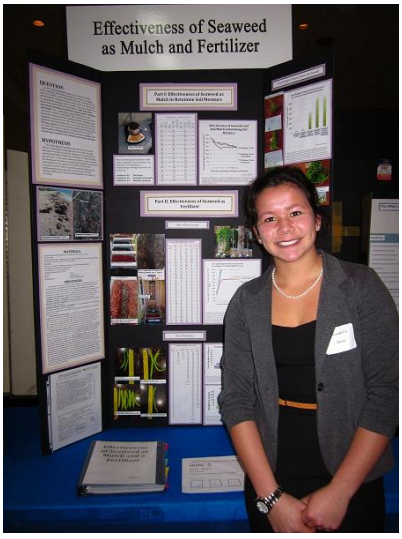
by Harry G. Lee and Rick Edwards

The 2015 Northeast Florida Regional Science and Engineering Fair (NEFRSEF) was held from February 8-10 at the Morocco Shrine Auditorium. We spent almost three hours reviewing the hundreds of abstracts limning the work done by contestants ranging from the sixth to twelfth grades from dozens of schools in four counties. The variety of topics covered and overall quality of the science applied was quite impressive. About a dozen projects dealt with topics we considered relevant the JSC criteria (malacology, invertebrate zoology, marine science), and we interviewed the researcher(s) of each. After a short caucus, we found consensus for our junior (grades six through 8) and senior (grades 9 through 12) winners, who received checks for $50.00 and $75.00 respectively.

Jasmine Roncevic, a 6th-grader at Julia Landon Middle School, working with Mr. Hollenbeck, presented the findings in her study, "Ocean Acidification and its effects on calcifying organisms." She used shells of *Mytilus edulis* Linnaeus, 1758, which she obtained from a seafood market. After separating the shells into four groups, she weighed each sample and subjected them to varing pH levels. Reweighing the shells at prescribed intervals, Jasmine was able to show a consistent loss of sample weight over the course of the study. This loss was directly proportional to the acidity of the solution to which the shells were exposed. She concluded that ocean acidification will, in fact adversely affect calcifying organisms.



Hannah Lee, a ninth-grader from the Bolles School working with advisor Ms. Kathryn Halloran presented her project: "Effectiveness of seaweed as mulch and fertilizer." While beachcombing in the Bahamas, she wondered if the mounds of stranded *Sargassum* weed could be put to good use. Thus was born her science fair project. Hannah compared the water-retaining and growth-promoting effects of dried Sargassum with selection of commercial mulches and plant fertilizers. She found that the seaweed outperformed the others as a mulch (water retention, and was second only to a single fertilizer in its ability to enhance growth and fruit yield of her bean plants. The practical value of this resource, which she had observed being wasted, even vilified, by beach-"enhancement" operations, was clearly demonstrated. *Sargassum* may be a new chapter in the "Green Revolution" thanks to Hannah's research!."



SEE PAGE 4 FOR INFORMATION ON HOW TO GET TO THE THORPE ADDRESS FOR SHELL CLUB MEETING

SEA TURTLES COMMUNICATE WITH EACH OTHER BEFORE HATCHING

Written by Emily July 30, 2014 in Marine Life, Sea Turtles

Cows moo. Ducks quack. Dogs bark. Turtles? Well, most people would say turtles don't make any noise, but that's not true. Recent evidence suggests that at least 47 turtle species make some form of sound to communicate messages ranging from social standings to reproductive signals. Photo credit: Scott R. Benson,

Leatherback turtle (*Dermochelys coriacea*).

It's also not just adults that make noise. Researchers recently discovered that baby sea turtles make sounds and communicate with each other from inside their eggs.

Researchers started monitoring leatherback sea turtle (*Dermochelys coriacea*) nests in Oaxaca, Mexico for sounds on day 51 — the point at which the turtles' ears should be developed enough to hear sound. The researchers immediately began detecting sound, recording more than 300 different noises overall.

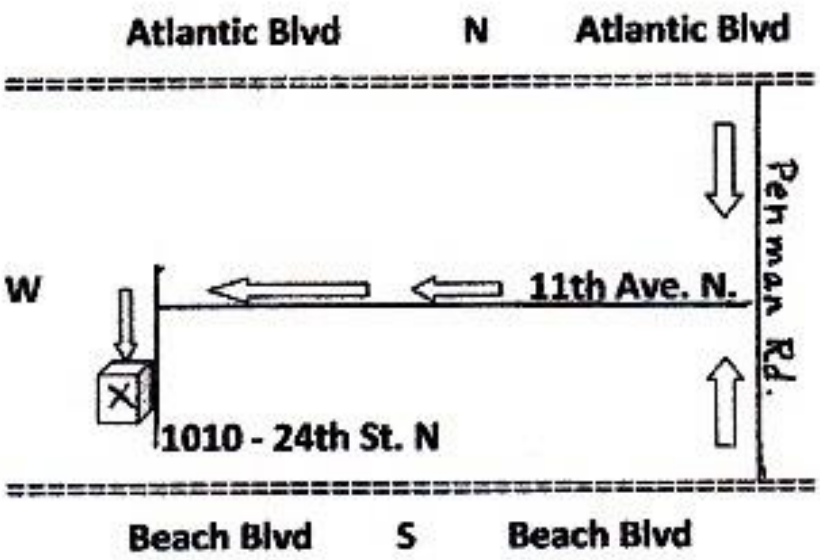
The researchers classified the sounds in four categories, including chirps, grunts, and "complex hybrid tones." They found that the last sound, the most complex of them all, was only recorded in nests with just eggs, not eggs and hatchlings, suggesting that the noise is used to coordinate hatching times. Being able to coordinate hatching times is an important survival technique, because, for helpless little leatherbacks, there is strength in numbers. If they all hatch together, there is a much better chance that more of them will make it across the beach and into the water.

These findings also highlight another potential problem for nesting turtles. Researchers have long known that light pollution can confuse nesting turtles and hatchlings. Now, the researchers note that noise pollution could also threaten the survival of baby sea turtles.

- From the article from the Smithsonian: Baby Turtles Coordinate Hatching By Talking to One Another Through Their Egg Shells. First Evidence of Leatherback Turtle (*Dermochelys coriacea*) Embryos and Hatchlings Emitting Sounds.

Map to Charlotte's House

IF YOU GET LOST CALL: 246-0874



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We need all of our members to be at the next club meeting (see above). Date of meeting March 26th, 2015 at 7:00PM. At our meeting we will talk about field trips, social gatherings and of course hunting for seashells. Also, let's try to find a great place for our Shell Show in 2016.

Everone needs to think of spots to go collecting. We have lots of local places (on low tides), so lets go and have a good time!