

Remember the turtles this 4th of July

Flashlights with red bulbs are the only lights that do not disorient turtle hatchlings

MELISSA REID

Staff Writer
melissa@lbknews.com

When celebrating this July 4th there are a few rules to remember along the beaches of Longboat Key, particularly with regard to sea turtle nests that may have potential hatchlings.

At night, lighting is prohibited. The use of flashlights with red bulbs are the only type allowed which do not disorient the sea turtle hatchlings, according to the Turtle Watch Group of Longboat Key. The following list of turtle safety precautions is provided by Turtle Watch:

Do:

- If you encounter a nesting turtle, remain quiet and observe from a distance
- Shield or turn off outdoor lights that are visible on the beach from May through October
- Close drapes after dark and put beach furniture far back from the water
- Fill in holes that may entrap hatch-

Celebrate Independence Day

Bradenton

- Fireworks on the Manatee River begin at 9 p.m.
- Anna Maria Island parade begins at 10 a.m. The Anna Maria Island Privateers host their annual July Fourth parade at the south end of Anna Maria Island winding through Holmes Beach, Bradenton Beach and Anna Maria. The Parade Party afterward will have food and live music

from noon to 4 p.m. Free. 780-1668; amiprivateers.org.

- Mattison's Riverside Fourth of July Dinner Celebration at 1200 First Ave. W., Bradenton. Dinner cost is \$49.95, children under 12 are \$14.95. Call 748-8087 for reservations.
- Palmetto Entertainment, a karaoke contest, kids carnival, car show and fireworks finale, starting at 11 a.m.

at Riverfront Park, 101 Eighth Ave., Palmetto. Free. 721-2138.

Sarasota

- Sarasota Bayfront Fireworks begins at about 9 p.m. at the Sarasota Bayfront along U.S. 41. Free. 371-8820, Ext. 1800; suncoastoffshore.org.
- Siesta Key Fireworks begin at 9:15 p.m. at Siesta Public Beach.

lings on their way to the water

- Place trash in its proper place

Do Not:

- Approach nesting turtles or hatchlings, make noise, or shine lights at turtles
- Use flashlights or fishing lamps on the beach
- Encourage a turtle to move while

nesting or pick up hatchlings that have emerged

- Use fireworks on the beach

The use of fireworks on the beaches of Longboat Key is prohibited except by public displays, which have permits.

As of June 10, the number of turtle nests on the Manatee county portion of Longboat Key is 25, with 11 false crawls.

The Sarasota County portion of Longboat Key has a total of 28 nests, with 15 false crawls as of June 7.

If anyone would like to join the Turtle Watch Group of Longboat Key, the group will meet at the Hilton on Longboat Key beach beginning at 6:45 a.m. July 5, or at the Lido beach north lifeguard station at 6:45 a.m. July 5.

Science News

Caffeine aids in exercise recovery

A new study published in the Journal of Applied Physiology shows that glycogen, the muscles' primary fuel source during exercise, is replenished more rapidly when athletes ingest both carbohydrates and caffeine following exhaustive exercise. Athletes who consumed caffeine with carbohydrates had 66 percent more glycogen in their muscles four hours after finishing intense, glycogen-depleting exercise, compared to when they consumed carbohydrates alone, according to the study.

The conclusion of the study was that caffeine aids in carbohydrate uptake. It has been established in previous studies that consuming carbohydrates and caffeine prior to and during exercise improves a variety of athletic performances.

The study was conducted on seven well-trained endurance cyclists who participated in four sessions. The participants first rode a cycle ergometer and then consumed a low-carbohydrate dinner before going home. This exercise workout was designed to reduce the athletes' muscle glycogen stores prior to the experimental trial the next day.

The athletes did not eat again until they returned to the lab the next day for the second session, when they again cycled until exhaustion. They then ingested a drink that contained carbohydrate alone or carbohydrate plus caffeine and rested in the laboratory for four hours.

During this post-exercise rest time, the researchers took several muscle biopsies and multiple blood samples to measure the amount of glycogen being replenished in the muscle.

The entire two-session process was repeated 7 to 10 days later. The only difference was that this time, if they drank the carbohydrate alone in the first trial, they drank the carbohydrate plus caffeine in the second trial, and vice versa.

The drinks looked, smelled and tasted the same, and both contained the same amount of carbohydrate. Neither the researchers nor the cyclists knew which regimen they were receiving, making it a double-blind, placebo-controlled experiment.

The researchers said it is not yet clear how caffeine aids in facilitating glucose uptake from the blood into the muscles. However, the higher circulating blood glucose and plasma insulin levels were likely to be a factor. In addition, caffeine may increase the activity of several signaling enzymes, including the calcium-dependent protein kinase and protein kinase B (also called Akt), which have roles in muscle glucose uptake during and after exercise.

Cancer cells reverse

Cancer starts when certain cellular signals duplicate out of control, making uncontrolled cell growth. In a

study published in Cancer Research, scientists at the Stanford University School of Medicine report that lowering levels of one cancer signal under a specific threshold reverses this process in mice, returning tumor cells to their normal, healthy state. This finding could help target cancer chemotherapy to tumors while minimizing side effects for the body's healthy cells.

The researchers identified an exact threshold level of the signaling molecule "Myc" that determined the fate of tumor cells in a cancer of the immune system in mice. Above the threshold, high levels of Myc drove immune cells to grow too large and multiply uncontrollably. When the researchers lowered Myc levels below the threshold, the same cells shrank to normal size, stopped multiplying and began dying normally.

Previous research has demonstrated that turning Myc and other cancer signals all the way off can kill a tumor, but this is the first time scientists have demonstrated a specific midway point at which a cancer signal reverted to a healthy level. Identifying the threshold was important because Myc functions in both healthy and cancerous cells as a transcription factor, a protein signal that binds DNA to turn genes on or off. Excess Myc contributes to about 50 percent of human cancers, including malignancies of the immune system and lung. But since Myc is essential at lower levels for normal cell function, turning Myc all the way off is not considered an option for treating cancer.

Site Plan, from page 1

exceeds those parameters, then the plan moves on to the next level of approval.

The city of Venice's site plan review has the final authority rest with the Planning Commission if the plans do not require Future Land Use amendments; and provides recommendations to the City Council for conceptual site plans presented for Future Land Use amendments. The City Council has final authority on conceptual site plans related to Future Land Use Map amendments.

The city of Anna Maria also employs a system similar to the city of Sarasota in that it gives final site plan authority to the administrative staff if the plan is within certain parameters, and if the plan exceeds those parameters, it then has to be reviewed by the Planning and Zoning Board for final approval or the City Commission if the plan exceeds both the first two levels of approval.

The city of Bradenton gives final site plan authority to the administrative staff on 'land alteration permits,' and the Planning Commission provides recommendations to the City Council on all site plans. Then the City Council has

final authority on site plans for Planned Developments, Future Land Use amendments and re-zonings, and large scale developments.

Reasons authority should stay with Planning and Zoning Board

In 1999, the decision to give final authority to the Planning and Zoning Board was made by the Town Commission in order to have "enhanced customer service, as well as (enhanced) ODP (Outline Development Plans) and (enhanced) Zoning Code standards," as indicated in the minutes of the May 3, 1999 regular commission meeting.

It was believed at the time that giving the authority to the Planning and Zoning Board would save time for the town staff and the Town Commission, and expedite the process for site plan applicants. This would result in better customer service. Also, the Planning and Zoning Board would have more time to devote to the issues of Zoning Codes and ODPs.

Former Mayor Ron Johnson who spoke at the June 17, 2008 Planning and Zoning Board meeting, explained that when he was on the Town Commission, the commissioners would have to do the

same process all over again that the Planning and Zoning Board had done, and it became a lengthy process. This method of duplicating the work, was believed to be costly in terms of town staff's time.

Reasons authority should return to Town Commission

As indicated in the minutes of a 1999 commission meeting, Longboat Key resident Helen Holt, resisted the effort to place the final site plan authority in the hands of the Planning and Zoning Board and felt that the final site plan authority should remain with the Town Commission since it is an elected body. The Planning and Zoning Board members are appointed officials, and therefore should not have final determination of site plans.

Others have returned to this issue as well. At the June 17, 2008 Planning and Zoning Board meeting, member George Symanski and Chairman Jim Brown discussed with Town Attorney David Persson the 'discretions' that require an elected body of officials to handle the final site plan authority.

Persson informed the Board that site plans allow for discretion in the areas of

transportation and wetlands; but when there were terms within the code such as 'as much as possible' it also meant there was room for discretion. Many residents feel that this discretion should remain in the hands of an elected body of officials who have more accountability to the residents and the public as a whole, than the appointed officials.

The new ordinance which will return the final site plan approval to the Town Commission will be read at the regular commission meeting July 7 at 7 p.m. in Town Hall, 501 Bay Isles Road.

Planning and Zoning Board member David Brenner pointed out in an interview last week that the reason for the change in 1999 to the Planning and Zoning Board having final site plan approval, was most likely due to the large amount of development on the key. This large volume was perhaps a larger burden on the commission, and so they approved giving the autonomy to the Planning and Zoning Board to make the final decision.

Now, with the Longboat Key Club's large development plan approaching, it is possible the commission feels it necessary to take responsibility back.